Supreme Court, U.S.
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No. 94 833

In the Supreme Court

OF THE

United States

OCTOBER TERM, 1994

ASARCO INCORPORATED,
Petitioner,

v.

LOUISIANA-PACIFIC CORPORATION, et al.,
Respondents.

APPENDICES TO PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

M. LAURENCE POPOFSKY
Counsel of Record

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APPENDIX A

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT TACOMA

LOUISIANA-PACIFIC CORPORATION, a Delaware Corporation,	)	
Plaintiff,	)	NO. C88-217TB CONSOLIDATED
v.	)	
ASARCO, INCORPORATED, a New Jersey Corporation, et. al.	)	JUDGMENT
Defendants/Third Party Plaintiffs,	)	
PORT OF TACOMA, a municipal corporation,	)	
Plaintiff,	)	
v.	)	
ASARCO INC., a New Jersey corporation, et. al.,	)	
Defendants.	)	

THIS MATTER comes before the court for entry of judgment. Federal law claims in this case were tried before the court, the Honorable Robert J. Bryan presiding, from October 29,

1990 to March 1, 1991. State law claims were simultaneously tried to a jury from October 31, 1990 to February 25, 1991.

It is hereby

ORDERED that judgment be and hereby is entered on both federal law and state law claims in accordance with the jury verdicts and the court's oral decision as follows:

I. State Law Claims

A. On January 23, 1991, the jury found that ASARCO copper reverbatory slag placed on plaintiffs' log yards is a product as defined by the Washington Products Liability Act.

B. On February 13, 1991, the jury found that

1. ASARCO did not trespass on Murray Pacific #1 site, Murray Pacific #2 site, Portac site, Cascade Timber site, or Wasser & Winters site;

2. ASARCO violated the Washington State Hazardous Waste Management Act at Murray Pacific #1 site, Murray Pacific #2 site, Portac site, Cascade Timber site, and Wasser & Winters site;

3. ASARCO supplied a product which was not reasonably safe in its design to Murray Pacific #1 site, Murray Pacific #2 site, Portac site, Cascade Timber site, and Wasser & Winters site;

4. ASARCO supplied a product which was not reasonably safe because adequate warnings were not provided with the product to Murray Pacific #1 site, Murray Pacific #2 site, Portac site, Cascade Timber site, and Wasser & Winters site;

5. ASARCO supplied a product which was not reasonably safe because adequate warnings were not provided after manufacture to Murray Pacific #1 site, Murray Pacific #2 site, Portac site, Cascade Timber site, and Wasser & Winters site;

6. ASARCO supplied a product which was not reasonably safe in construction to Murray Pacific #1 site, Murray Pacific #2 site, Portac site, Cascade Timber site, and Wasser & Winters site;

7. ASARCO supplied a product which was not reasonably safe because it did not conform to manufacturer's express warranty to Murray Pacific #1 site, Murray Pacific #2 site, Portac site, Cascade Timber site, and Wasser & Winters site;

8. ASARCO supplied a product which was not reasonably safe because it did not conform to manufacturer's implied warranty of fitness for a particular purpose to Murray Pacific #1 site, Murray Pacific #2 site, Portac site, Cascade Timber site, and Wasser & Winters site.

C. On February 25, 1991, the jury found contributory negligence as to all state claims as follows:

1. On the Murray Pacific #1 site, the jury found that Murray Pacific was negligent, and of the total combined fault, 11% was attributed to Murray Pacific and 89% was attributed to ASARCO.

2. On the Murray Pacific #2 site, the jury found that Murray Pacific and the Port of Tacoma were negligent, and of the total combined fault, 8% was attributed to the Port of Tacoma, 8% was attributed to Murray Pacific and 84% was attributed to ASARCO.

3. On the Cascade Timber #3 site, the jury found that Cascade Timber was not negligent, that the Port of Tacoma was negligent. Of the total combined fault, 21% was attributed to the Port of Tacoma and 79% was attributed to ASARCO.

4. On the Portac site, the jury found that Portac, Inc. and the Port of Tacoma were negligent. Of the total combined fault, 13% was attributed to Portac, Inc., 12% was attributed to the Port of Tacoma, and 75% was attributed to ASARCO.

5. On the Wasser & Winters site, the jury found that Wasser & Winters and the Port of Tacoma were not negligent and that the total fault of 100% was attributed to ASARCO.

D. On February 25, 1991, the jury assessed damages against ASARCO at the Portac site in favor of the Port of Tacoma in the sum of Two Million Four Hundred Seventy-Four Thousand Three Hundred Twenty-One Dollars ($2,474,321.00); and in favor of Portac, Inc. in the sum of Three Million One Hundred Seventy-Nine Thousand One Hundred Fifty Dollars ($3,179,150.00).

II. Federal Law Claims

A. On February 26, 1991, and on March 1, 1991, the court rendered its findings of fact and conclusions of law in its oral decision, which is fully incorporated herein by this reference,

pursuant to Fed. R. Civ. P. 52(a). The court found that ASARCO arranged for disposal of hazardous substances on the site and there has been a release of those hazardous substance, in violation of 42 U.S.C. Sec. 9607(a)(1).

B. The court assessed apportionment of liability for necessary costs of response incurred or which may be incurred in the future consistent with the national contingency plan (hereinafter collectively "Response Costs") pursuant to 42 U.S.C. § 9607(a), 42 U.S.C. Sec. 9613(f)(1) and 42 U.S.C. § 9613(g)(2), as follows:

1. At the Portac site, the court assessed the amount of Response Costs incurred at this site as $2,421,566.40 for Portac, Inc. and $2,474,321.62 for the Port of Tacoma. The court found that Portac, Inc. is responsible for payment of 10% of its Response Costs and ASARCO is responsible for payment of 90% of Portac, Inc.'s Response Costs. The Port of Tacoma is responsible for payment of 10% of its Response Costs and ASARCO is responsible for payment of 90% of the Port of Tacoma's Response Costs.

2. At the Cascade Timber site, Cascade Timber has no responsibility for any of the Response Costs, the Port of Tacoma is responsible for payment of 10% of the Response Costs, and ASARCO is responsible for payment of 90% of the Response Costs.

3. At the Wasser & Winters site, ASARCO has 100% responsibility for payment of the Response Costs; Wasser & Winters and the Port of Tacoma have no responsibility for the Response Costs.

4. At the Murray Pacific #2 site, Murray Pacific is responsible for payment of 4% of the Response Costs, the Port of Tacoma is responsible for payment of 4% of the Response Costs, and ASARCO is responsible for payment of 92% of the Response Costs.

5. At the Murray Pacific #1 site, Murray Pacific is responsible for payment of 5% of the Response Costs, and ASARCO is responsible for payment of 95% of the Response Costs.

6. At the Louisiana Pacific site, ASARCO has 100% responsibility for payment of the Response Costs and Louisiana Pacific has no responsibility.

7. At the B & L Landfill site, Executive Bark, Inc., Cascade Timber, Wasser & Winters, Portac, Inc., Louisiana Pacific, and B & L Trucking & Construction have no responsibility for Response Costs, William Fjetland is responsible for payment of 7% of the Response Costs, Murray Pacific is responsible for payment of 7% of the Response Costs, Eagle Trucking, Inc. is responsible for payment of 7% of the Response Costs, and ASARCO is responsible for payment of 79% of the Response Costs.

C. Prejudgment interest, attorney fees, and costs shall be determined at a later date on motions by the parties. The amounts awarded, if any, shall be incorporated in this judgment.

D. The court retains jurisdiction to adjudicate issues of damages and/or Response costs which have not yet been determined.

The Clerk of the Court shall send uncertified copies of this Judgment to all counsel of record.

DATED this *3* day of *June*, 19*91*.

Robert Bryan
ROBERT J. BRYAN
United States District Judge

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT TACOMA

LOUISIANA-PACIFIC CORPORATION, PORT OF TACOMA, a municipal corporation; PORTAC, INCORPORATED; MURRAY PACIFIC CORPORATION; WASSER & WINTERS CO., a corporation; CASCADE TIMBER CO., a corporation,	
Plaintiffs,	NO. C88-217TB
v.	
ASARCO, INCORPORATED,	
Defendant,	
v.	
WILLIAM FJETLAND; B&L TRUCKING, a corporation; EAGLE TRUCKING, a corporation,	
Third Party Defendants.	

INSTRUCTIONS TO THE JURY ON ISSUE #1

DATED this *23d* day of *January*, 1991.

Robert J. Bryan
ROBERT J. BRYAN
United States District Judge

INSTRUCTION NO. 1

A statute provides:

> "Product" means any object possessing intrinsic value, capable of delivery either as an assembled whole or as a component part or parts, and produced for introduction into trade or commerce.
>
> Intrinsic value means a true, inherent and essential value of the thing itself, not depending on place or person; that is, value which comes from the object itself rather than from any special features that make the value different from the value of the object itself.
>
> Produced means offered or presented and also means made or manufactured.

The defendant, ASARCO, has the burden of proving that the copper reverbatory slag placed on plaintiffs' log yards is a product as defined in this instruction.

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT TACOMA

LOUISIANA-PACIFIC CORPORATION, PORT OF TACOMA, a municipal corporation; PORTAC, INCORPORATED; MURRAY PACIFIC CORPORATION; WASSER & WINTERS CO., a corporation; CASCADE TIMBER CO., a corporation,	NO. C88-217TB
Plaintiffs,	VERDICT FORM ISSUE #1
v.	
ASARCO, INCORPORATED,	
Defendant,	
v.	
WILLIAM FJETLAND; B&L TRUCKING, a corporation; EAGLE TRUCKING, a corporation,	
Third Party Defendants.	

We, the jury, make the following answer to the question submitted by the court:

Is ASARCO copper reverbatory slag placed on plaintiffs' log yards a product as defined by statute?

ANSWER: *Yes* (Yes or No)

DATED this 23rd day of January, 1991.

_____

FOREPERSON

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT TACOMA

LOUISIANA-PACIFIC CORPORATION, a Delaware Corporation,	)	Consolidated
Plaintiff,	)	Docket No. C88-217TB
v.	)	Tacoma, Washington
	)	February 25, 1991
ASARCO, INCORPORATED, a New Jersey corporation, et al.,	)	1:35 p.m.
Defendants.	)	

PORT OF TACOMA, a Washington municipal corporation,

Plaintiff,

v.

ASARCO INCORPORATED, a New Jersey corporation; PORTAC, INC., a Delaware corporation; MURRAY PACIFIC CORPORATION, a Washington corporation; WASSER & WINTERS COMPANY, a Washington corporation; and CASCADE TIMBER COMPANY, a Washington corporation,

Defendants.

VOLUME LII-B
TRANSCRIPT OF TRIAL
BEFORE THE HONORABLE ROBERT J. BRYAN
UNITED STATES DISTRICT JUDGE

(Following was reported by Julaine V. Ryen, Court Reporter.)

(Court reconvened at 4:00 p.m.)

THE COURT: Well, I've been sitting here for four months trying to absorb this case and the facts of it. You have heard me on specific issues as they have come up, my view of them, but you haven't heard me, I guess, in regard to the overall and basic issues involved in this case.

First, I think I should address the relationship of the jury verdicts to court decisions, and in particular to findings of fact. It seems to me that the appropriate way for me to approach any decisions that I have to make on the merits of this case is independently; to decide myself what the facts show. That should

be the ruling, unless whatever factual findings or conclusions that I reach are inconsistent with the jury verdict. If they are inconsistent, obviously, I have to be guided by the jury's findings. Obviously, many of the issues that I have to decide are not on all fours with what the jury has decided, but I can't make a finding that is inconsistent to what the jury has done. But it seems to me the proper and most intellectually honest way to approach this is for me to make independent decisions in my own mind and then balance them to see if there is anything in what the jury has done that tells me I can't do what I think I ought to do. That is the approach I have taken with this.

I don't want to oversimplify this case, but after four months, it appears to me to be not a very complex case. I was urged to apply common sense. In arguments here, I was urged to apply common sense to this.

Let me look at the historical facts that lead us to this point through my sense, which hopefully is common sense.

For nearly a hundred years, Asarco smelted copper ore here in Tacoma, and I don't know if they made a profit, but at least they made enough to stay in business, and hopefully their shareholders got an occasional dividend. They carried on that business, and in doing so, a great amount of slag was created that was treated essentially as a waste product, if you will. You can call it what you want, but it was historically treated as a waste and dumped into the bay, which fortunately was able to create a landfill.

A time came in history when the dump site was no longer available and Asarco had to find alternative ways to dispose of their slag. It is at that point that we have a sharp divergence in opinion here as to what went on. But it appears to me that at that point what happens is that Asarco, along with others, concocted a scheme to get rid of their slag, and they were so intent on disposing of this slag so that they could stay in business, they ignored the obvious risks. What they did was dispose of this slag through this IMP, Black Knight outfit, in many ways, one of which was to dispose of it on the log yards. It made a mess, and the mess is partly Asarco's mess. Common sense tells us that Asarco should participate in cleaning up their own mess.

Now, they claim that they have no responsibility whatsoever for that mess that was created, and I find that an unrealistic approach from a common sense point of view.

That simple analysis of the facts here leaves out an essential ingredient, and that is to compare the facts with the law, because if the law doesn't lead us to where common sense might lead us, the law controls rather than common sense.

I guess the best recital of the law that we have now, outside of the statutes themselves and the regulations, is this *Stevens Creek case*. It is good law. I don't think there is any question but what it is good law. But the application of the law is always based on the facts.

If we apply the rules of the statute as they are recited in *Stevens Creek*, we find some interesting things.

The first thing that strikes me about that case is at what point do we determine the question of whether this was a solid waste disposal scheme or whether it was some sort of a useful product sale? *Stevens Creek Association* is instructive on that. They say, and Mr. Anderson agreed, that in the context of CERCLA, hazardous substances are generally dealt with at the point when they are about to, or have become wastes. Mr. Anderson said when it is thrown away.

Now, before we go back to that moment in time -- well, I guess you can't say before you go back to that moment in time, because all this comes at the same time and you have to consider it together. But the time that we are primarily concerned with here is when this slag left Asarco's control. That, it seems to me, is the point at which we must determine whether it was a waste, and whether it was a solid waste or a hazardous substance.

Well, a solid waste is defined by statute, and it's repeated in the *Stevens Creek* case, as "any garbage, refuse, sludge, . . . and other discarded material. . . ."

At the point when Asarco made this slag available to IMP, in my view from the evidence in this case, it was other discarded material. They were trying to get rid of it. That was the driving factor in their actions.

Under solid waste comes the next question, which is referred to as a subset in *Stevens Creek*, as to whether it's a hazardous solid waste, which may not be necessary to decide at this

moment, but it certainly appears clear in this case, for a number of reasons, that it was hazardous and that it contained four metals in substantial quantities, one of which was a carcinogen. It was hazardous also from the standpoint that it leached these heavy metals into the environment.

Now, the next question, of course, is was it disposed of by Asarco or was there arrangement for disposal. Again, we can look to the statute as it is set forth in *Stevens Creek*. The SWDA they refer to, which I guess is RCRA, as we have been referring to it here in court, and we see clearly from the evidence in this case that Asarco arranged that at least part of the slag be deposited, dumped, or placed on land, and in a way that the constituents of the slag could enter the environment or be discharged to the waters. That was done, it seems to me, quite without any consideration of whatever additional effect the mixing of the slag with woodwaste may have had on the degree of leaching that occurred into the waterway.

I indicated a minute ago that I felt the evidence indicated here that Asarco basically concocted a scheme to get rid of this slag, and I think that's what they did. Now, I want to talk a little bit more about that and about the *Stevens Creek* case.

First, in applying the rules of *Stevens Creek*, we have to apply them to the facts here. *Stevens Creek* was a building materials case. It was not factually anything like this case. This is a solid hazardous waste case, and this is a disposal case. The same rules of law apply, but you've got to determine the facts in order to apply those rules of law.

In my view, the slag in this case was never a product to Asarco in such a way as to make it something other than a waste. The product idea for log yard use was something that IMP and Asarco dreamed up and tried to develop to further the disposal of the slag from the site so that they could continue to operate the smelter, and that was from Asarco's point of view. They called it a product in order to get rid of it, but it seems to me that that was primarily Asarco's label.

Now, this so-called product was so bad that it, in my view, was never really a legitimate product. It was no more than a hopeful idea that they hoped would develop into some sort of a useful and harmless product, but it never did. As the jury found,

it was not designed reasonably safe; it was not constructed reasonably safe. It was not reasonably safe because it didn't have adequate warnings either before or after it was delivered. It was not as expressly warranted or as impliedly warranted. And that leads up to the next question, which is was it a useful product or put to a productive use by the buyers? The answer to that is that it was only insofar as they thought it was something that it was not.

I want to refer to page 1362, and in the second column of the *Stevens Creek* case, where Judge Rymer indicated that there was no meaningful difference for purposes of CERCLA between a party who sells or transports a product containing or composed of hazardous substances for a productive use and a party who actually puts that product to its constructive use. She added, "we see no reason to adopt a different definition in this case."

That's not the facts we have here, because in this case Asarco sold this product containing hazardous substance not for a productive use but to get rid of it, to dispose of it. The idea that it may also in some way, hopefully, in the future provide a productive use was only a design for the disposal, based on the evidence that I heard in this case over the last four months.

So *Stevens Creek* is good law, but that same law applies differently to the facts in this case.

Now, counsel urged, and I think rightly so, that this should be an objective test here insofar as that is possible under the statute and under the *Stevens Creek* case. But again, objective tests depend on the facts. You have to take the facts and apply the objective test to them. The facts here are that this was a disposal of solid waste, not a sale of a useful product. You simply, in my view, cannot torture the facts to get something into a category in order to escape reasonable liability. I think that that's what has been attempted here, is to torture the real motive and the real facts behind what was done in order to get this case, or to try to get this case, out of the CERCLA umbrella. It is clear to me from the evidence I heard that this issue is that simple, and that Asarco, along with all the other people -- well, at least along with some of the other people involved in this case -- must share the responsibility and participate in the cleanup.

As to each of the plaintiffs in this case, and for that matter as to the third parties, all of the elements of CERCLA liability have been made out, and what remains to be done is to determine the allocation of that responsibility.

I said I didn't want to oversimplify. I hope that that isn't an oversimplification of this case, but that's what I heard over the last four months. It is just about that simple. At this point I can only say that I wish that we had spent the money that this trial cost to clean up some of these sites in Commencement Bay. But I guess that's the next issue that we must face, is how that expense should be allocated. I guess we will start on that task tomorrow morning at 9:30.

(Recessed at 4:17 p.m.)

CERTIFICATE

I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter.

February 25, 1991

JULAINE V. RYEN — Date

APPENDIX B

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LOUISIANA-PACIFIC CORPORATION; PORT OF TACOMA, *Plaintiffs-Appellees,* v. ASARCO INCORPORATED, *Defendant-Third-Party Plaintiff-Appellant.* v. WILLIAM FJETLAND; B & L TRUCKING AND CONSTRUCTION CO., INC.; INDUSTRIAL MINERAL PRODUCTS, INC.; MURRAY PACIFIC CORPORATION; PORTAC, INC.; CASCADE TIMBER COMPANY; EXECUTIVE BARK INC.; WASSER & WINTERS COMPANY; EAGLE TRUCKING, INC. *Third-Party Defendants-Appellees.*	No. 92-35061 D.C. No. CV-88-00217-RJB

LOUISIANA-PACIFIC CORPORATION,
Plaintiff,

v.

CASCADE TIMBER COMPANY,
Third-Party Defendant-Counter-claimant-Appellant,

v.

ASARCO INCORPORATED,
Defendant-Third Party Plaintiff-Appellee,

WILLIAM FJETLAND; B&L TRUCKING AND CONSTRUCTION CO., INC.; INDUSTRIAL MINERAL PRODUCTS, INC.; MURRAY PACIFIC CORPORATION; PORTAC, INC.,
Third-Party Defendants.

No. 92-35144

D.C. No. CV-88-00217-TB

LOUISIANA-PACIFIC CORPORATION; PORT OF TACOMA,
Plaintiffs,

PORTAC, INC.,
Third-Party Defendant-Counter-Claimant-Appellant,

v.

ASARCO INCORPORATED,
Defendant-Third Party Plaintiff-Appellee,

WILLIAM FJETLAND, *et al.*
Third-Party Defendants.

No. 92-35145

D.C. No. CV-88-00217-TB

LOUISIANA-PACIFIC CORPORATION,
Plaintiff,

v.

MURRAY PACIFIC CORPORATION,
Third-Party Defendant-Counter-Claimant-Appellant,

v.

ASARCO INCORPORATED,
Defendant-Third-Party Plaintiff-Appellee,

WILLIAM FJETLAND; B & L TRUCKING AND CONSTRUCTION CO., INC.; INDUSTRIAL MINERAL PRODUCTS, INC.;
Third-Party Defendants.

No. 92-35148

D.C. No. CV-88-00217-TB

LOUISIANA-PACIFIC CORPORATION; PORT OF TACOMA,
Plaintiffs,

WASSER & WINTERS COMPANY,
Third-Party Defendant-Counter-Claimant-Appellant,

v.

ASARCO INCORPORATED,
Defendant-Third-Party Plaintiff-Appellee,

WILLIAM FJETLAND, *et al.*
Third-Party Defendants.

No. 92-35149

D.C. No. CV-88-00217-RJB

LOUISIANA-PACIFIC CORPORATION,

Plaintiff,

and

PORT OF TACOMA,
Plaintiff-Appellant,

v.

ASARCO INCORPORATED,
Defendant-Third-Party
Plaintiff-Appellee.

No. 92-35152

D.C. No.
CV-88-00217-TB

ORDER AND
AMENDED OPINION

Appeals from the United States District Court
for the Western District of Washington
Robert J. Bryan, District Judge, Presiding

Argued and Submitted
April 7, 1993 - Seattle, Wasington

Opinion filed September 23, 1993
Amended January 13, 1994
Opinion withdrawn April 28, 1994
Opinion filed April 28, 1994
Amended August 30, 1994

Before: Eugene A. Wright, David R. Thompson and
Andrew J. Kleinfeld, Circuit Judges.

Opinion by Judge Thompson

SUMMARY

Environmental Law/Liability/Hazardous Waste

The court of appeals affirmed in part a district court judgement, reversed in part, and remanded in part. The court held that slag is regulated as a hazardous substance by the

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

Appellant ASARCO, Inc. produced slag as a by-product of its smelting operations. the slag was marketed for use in log yards. After the Environmental Protection Agency (EPA) found high concentrations of heavy metals in water runoff from a logyard, the Washington Department of Ecology (WDOE) determined that slag was the likely cause of the contamination. Over the next several years, the WDOE sent letters, made calls, and held meetings with representatives of the affected sites. Later, the WDOE began formally requiring cleanups.

Appellee Louisiana-Pacific Corp. sued ASARCO under CERCLA for response costs for the cleanup of its logyard and for contribution of indemnity for its liability for the cost of cleanup of the landfill to which it hauled the slag. ASARCO counter-claimed against Louisiana-Pacific under CERCLA and state law.

ASARCO brought third-party claims against several other logyards that disposed of slag at the landfill. It also sued the owner and operator of the landfill and the trucking company that transported the slag. Some of the third-party defendants counter-claimed against ASARCO asserting claims under CERCLA, the Washington Hazardous Waste Management Act (HWMA), the Washington Model Toxics Control Act (MTCA), and the Washington Products Liability Act (WPLA). The third-party defendants also asserted common-law claims against ASARCO.

Appellee Port of Tacoma, which owned some of the logyard sites, sued ASARCO for response costs under CERCLA and state law, and for indemnity and contribution for cleaning up the landfill.

On ASARCO's motion, the district court dismissed some of the state common-law claims on the ground that they were preempted by the WPLA. It also dismissed the MTCA claims because at that time the MTCA did not provide for a private cause of action. A jury found ASARCO liable to each plaintiff on both the WPLA and HWMA claims. The district court found ASARCO liable under CERCLA. The court awarded attorney's fees under both CERCLA and the HWMA, and costs under both federal and state law.

ASARCO appealed, contending that 1) its liability under CERCLA should be reversed because slag contamination is excluded from CERCLA liability under the Bevill Amendment, 2)

the jury's finding that slag is a product under the WPLA precluded a finding by the court that it was a waste under CERCLA, 3) it should not be liable for the cleanup costs incurred in cleaning up a particular site, the Portac site, because the cleanup of that site was not handled as required by the National Contingency Plan (NCP), 4) the district court erred in awarding attorney's fees and costs under CERCLA, 5) the judgment rendering it liable under the HWMA should be reversed because the HWMA did not provide for a private cause of action at the time of the slag sales, 6) the district court erred in rejecting its motion to dismiss the WPLA claim on statute of limitations grounds, and 7) loss-of-use damages were improperly awarded under the WPLA.

[1] Slag is a material exempted from Resource Conservation and Recovery Act of 1976 regulation under the Bevill Amendment. ASARCO contended that the incorporation of this exemption into CERCLA operated to except slag from CERCLA regulation as well. [2] However, the district court found that slag's components included copper, lead, arsenic and zinc, which are hazardous substances under CERCLA. [3] The fact that slag was excepted from a CERCLA subsection by the Bevill Amendment had no bearing on whether slag in its component forms was excepted from other CERCLA subsections.

[4] The sale of slag to the logyards could simultaneously be both the sale of a product with intrinsic value in trade or commerce under Washington law, and the disposal of a hazardous substance under CERCLA. [5] Thus, the jury's finding that slag was a product under the WPLA did not preclude the court from finding that it was a waste under CERCLA.

[6] In regard to the Portac site, the issue of substantial compliance with the NCP was a mixed question of law and fact. [7] Although compliance was not perfect, it was substantial. After preparation of a feasibility study outlining cleanup options for the site, the Port held meetings at which the cleanup of the Portac site was on the agenda.

[8] The Supreme Court recently held that attorney's fees are not recoverable under CERCLA, except for those that are "closely tied" to actual cleanup. [9] In addition, because bringing the private cost recovery action involved in this case could not be classified as an "enforcement activity" under CERCLA, the district court exceeded its authority to the extent its award of

litigation costs exceeded those costs recoverable under 28 U.S.C. §§ 1821(b) and 1920.

[10] The amendment to the HWMA that created a private cause of action could not be applied retroactively. [11] The amendment contained no retroactivity provision. [12] In addition, ASARCO did not own or control the properties from which the slag mixture continued to leach hazardous substances. Thus, ASARCO had no liability for an "ongoing violation" under the HWMA.

[13] The WPLA precluded a recovery of damages for loss of use of property.

[14] The WPLA claims accrued when the landowners became aware, or should have become aware, of the contamination of their properties. The question of when this occurred was left to be addressed on remand. [15] The Port, however, acted in a sovereign capacity in leasing the logyards; [16] therefore, the statute of limitations did not run against it.

[17] The district court dismissed the MTCA claims because it concluded that the MTCA did not create a private cause of action. [18] An amended MTCA, however, clearly created a private right of action, and made it retroactive to cover harms that already occurred. The amended statute, therefore, provided a private cause of action to the plaintiffs.

COUNSEL

Peter A. Wald and M. Laurence Popofsky, Heller, Ehrman, White & McAuliffe, San Francisco, California, for defendant-third-party plaintiff-appellant ASARCO, Incorporated.

Jeffrey K. Leppo and Karen McGaffey, Bogle & Gates, Seattle Washington, for plaintiff-appellee Port of Tacoma.

Roger Clegg, Acting Assistant Attorney General, and Timothy J. Dowling, Environment and Natural Resources Division, United States Department of Justice, Washington, D.C., for amicus curiae.

ORDER

The opinion filed April 28, 1994 is amended as follows:

1. At page 4296 of the slip opinion, the third full paragraph which begins "We have jurisdiction" is amended. The second and third sentences are deleted and the following sentences are inserted in their place:

> We affirm the award of damages under CERCLA. We reverse the award of attorney fees under CERCLA, and the award of litigation expenses to the extent that award included expenses not recoverable as costs under 28 U.S.C. §§ 1821(b) and 1920. We also reverse the finding of liability under the HWMA, and the award of loss-of-use damages under the WPLA.

2. At page 4297 of the slip opinion, the first full paragraph which begins "We do not decide" is deleted and the following is inserted in its place:

> We reverse the district court's dismissal of the plaintiffs' intentional common-law nuisance claim. We hold that although the WPLA preempts the plaintiffs' common-law nuisance claims based on allegations of negligence, it does not preempt the common-law nuisance claim based on allegations of intentional conduct, and we remand that claim to the district court.

3. At page 4311 of the slip opinion, part D is deleted and the following is inserted in its place:

> D. Did the district court err in awarding attorney fees and litigation expenses under CERCLA?
>
> The district court awarded the plaintiffs their attorney fees and litigation expenses under CERCLA. After this appeal was filed, we held that attorney fees are not recoverable under CERCLA. *Stanton Road Ass'n v. Lohrey Enter.*, 984 F.2d 1015, 1020 (9th Cir. 1993). The Supreme Court recently held the same, except for attorney fees "closely tied to the actual cleanup." *Key Tronic Corp. v. United States*, 114 S. Ct. 1960, 1967 (1994).

Neither we nor the Supreme Court has decided the question whether litigation expenses over and above the expenses recoverable under 28 U.S.C. §§ 1821(b) and 1920 may be recovered in a CERCLA action. *But see Key Tronic,* 114 S. Ct. at 1967 n.14. In the present case, the district court's award of litigation expenses totalled $436,705.31. This award included such items as travel, lodging, expert witness fees, long distance telephone calls and meals.

"[T]he full extent of a federal court's power to shift litigation costs absent express statutory authority to go further" is defined by 28 U.S.C. §§ 1821((b) and 1920. *West Virginia Univ. Hosp., Inc. v. Casey*, 499 U.S. 83, 86 (1991). Unless CERCLA permits the recovery of litigation expenses in excess of those recoverable under 28 U.S.C. §§ 1821(b) and 1920, the district court exceeded its authority in making its litigation expense award.

CERCLA authorizes private parties to recover "necessary costs of response . . . ." 42 U.S.C. § 9607 (a)(4)(B). CERCLA defines "response" as including "enforcement activities." *Id.* at § 9601(25). The plaintiffs argue that a private cost recovery action is an enforcement activity, making litigation expenses recoverable response costs. We disagree.

Key Tronic is instructive. There, in holding that attorney fees are not recoverable for bringing a cost recovery action under CERCLA, the Court stated that the phrase "enforcement activities" should not be construed "as encompassing the kind of private cost recovery action at issue in [that] case." *Key Tronic*, 114 S. Ct. at 1967. As in *Key Tronic*, the present litigation involves a private cost recovery action under CERCLA. Because bringing this litigation cannot be classified as an "enforcement activity" under CERCLA, the district court exceeded its authority to the extent its award of litigation costs exceeded those costs recoverable under 28 U.S.C. §§ 1821(b) and 1920.

4. At page 4326 of the slip opinion, the first paragraph under part V which begins "In their cross-appeal" is amended. The second sentence is deleted, and the following is inserted in its place:

Attorney fees for bringing a cost recovery action are not recoverable under CERCLA. *Key Tronic*, 114 S. Ct. at 1967; *Stanton Road*, 984 F.2d at 1020.

5. At page 4326 of the slip opinion, the second paragraph under part V which begins "The plaintiffs also contend" is deleted and the following is inserted in its place:

> The plaintiffs also contend the district court should not have dismissed their common-law nuisance claims. The plaintiffs base these claims on allegations of negligent and intentional conduct. While WPLA broadly preempts many common-law remedies, it expressly excludes claims based on "intentionally caused harm." Wash. Rev. Code Ann. § 7.72.010(4) (West 1992). This exclusion applies to the plaintiffs' intentionally caused nuisance claim. The WPLA preempts the plaintiffs' common-law nuisance claim based on allegations of intentional conduct.
>
> Nor are damages which may be recoverable on the intentional nuisance claim subsumed within the CERCLA recovery. Washington law provides for the recovery of "the loss of use or of income [from the land] for a reasonable time pending such restoration." *Colella v. King County*, 433 P.2d 154, 158 (Wash. 1967). On remand the district court should determine whether ASARCO's conduct constituted an intentional nuisance under Washington law and, if so, what damages are recoverable.

6. At page 4326 of the slip opinion, the first paragraph under the heading CONCLUSION is amended. The first two sentences are deleted and the following sentences are inserted in their place:

> We affirm the district court's award of damages under CERCLA. We reverse the district court's award of attorney fees under CERCLA, and its award of litigation expenses to the extent its award of litigation expenses to the extent its award included items not recoverable as costs under 28 U.S.C. §§ 1821(b) and 1920.

7. At page 4327 of the slip opinion, at the end of the paragraph that begins on the preceding page under the heading

"CONCLUSION" and which ends on page 4327 with the words "award which we uphold.", the following sentence is added at the end of the paragraph: "We remand to the district court the issue whether ASARCO's conduct constituted an intentional nuisance and, if so, what damages are recoverable."

OPINION

THOMPSON, Circuit Judge:

OVERVIEW

This suit arises from the pollution of several sites near the Port of Tacoma ("the Port") by heavy metal contaminants leached from a slag and woodwaste mixture. ASARCO, Inc. ("ASARCO") produced the slag as a by-product of its smelting operations. ASARCO was found liable to the site owners and operators under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. §§ 9601-9626 (1988) ("CERCLA"); the Washington Hazardous Waste Management Act, Wash. Rev. Code Ann. § 70.105.005 et seq. (West 1992) ("the HWMA"); and the Washington Products Liability Act, Wash. Rev. Code Ann. § 7.72.010 et seq. (West 1992) ("the WPLA").

On appeal, ASARCO contends slag is excluded from CERCLA's definition of hazardous substances under the Bevill Amendment, and the jury's finding that slag was a product for WPLA purposes precluded a finding that it was a hazardous substance under the HWMA and CERCLA. It also argues the state statute of limitations had expired on all the state law claims.

ASARCO further contends the district court erred in denying its motion for summary judgment on the HWMA claims because its sales of slag occurred before the HWMA allowed a private cause of action, and the slag sales occurred at a time when Washington regulations excluded "materials in commerce" from the HWMA.

ASARCO also argues that the district court erred by imposing response costs against it under CERCLA for the cleanup of the site known as the "Portac site" because the claimants failed to comply with the National Contingency Plan ("the NCP"); awarding attorney fees and costs under CERCLA which are not recoverable under the statute; awarding loss-of-use damages under

the WPLA for loss of use of the Portac site; and making various awards of attorney fees, costs, and prejudgment interest under state law.

Finally, ASARCO argues that it is entitled to a new trial because the district court erred in making rulings that affected the jury's verdict on the question of comparative fault. In support of this argument it contends the district court erred by refusing to admit evidence of the plaintiffs' violations of the permit requirements of the Clean Water Act, 33 U.S.C. § 1342(p) (1988); refusing to instruct the jury that evidence of violations of the Washington Water Pollution Control Act, Wash. Rev. Code Ann. § 90.48.010 et seq. (West 1992) ("the WPCA"), was evidence of negligence; and giving erroneous jury instructions under the HWMA.

The plaintiffs cross-appeal. They contend the district court erred in reducing their attorney fees under CERCLA by the percentage of comparative fault assigned to them. In addition, they contend the district court erred in determining that their nuisance claims were preempted by the WPLA and in dismissing their claims under the Washington Model Toxics Control Act, Wash. Rev. Code Ann. § 70.105D.010 et seq. (Amended 1993) ("the MTCA").

We have jurisdiction under 28 U.S.C. § 1291. We affirm the award of damages under CERCLA. We reverse the award of attorney fees under CERCLA, and the award of litigation expenses to the extent that award included expenses not recoverable as costs under 28 U.S.C. §§ 1821(b) and 1920. We also reverse the finding of liability under the HWMA, and the award of loss-of-use damages under the WPLA. We remand to the district court the question of when the statute of limitations began to run on the plaintiffs' WPLA claims. Because of a recent amendment to the MTCA, we reverse the district court's dismissal of the plaintiffs' claims under that statute. Although the damages recoverable under the MTCA might not exceed the damages recoverable under CERCLA, a question on which we express no opinion, attorney fees are recoverable under the MTCA. Accordingly, we remand the MTCA claims to the district court.

We reverse the district court's dismissal of the plaintiffs' intentional common-law nuisance claim. We hold that although the WPLA preempts the plaintiffs' common-law nuisance claim based on allegations of negligence, it does not preempt the

common-law nuisance claim based on allegations of intentional conduct, and we remand that claim to the district court.

FACTS

ASARCO has been smelting copper ore at its smelter near Tacoma since 1905. Smelting separates copper out of copper ore and produces large amounts of a by-product called slag. For many years ASARCO dumped most of its slag into Commencement Bay. It had an agreement with the Metropolitan Park District of Tacoma to maintain a breakwater at that site.

In about 1973, ASARCO embarked on a plan to develop a market for its slag. It contracted with Black Knight, Inc. ("Black Knight") to take all of ASARCO's slag and resell what it could. Black Knight decided to market the slag for use as "ballast" in logyards. The logyards used the slag essentially like gravel, to provide firmer ground. This made the storage of logs and the operation of heavy equipment easier. The logyards would use a load of slag until it became too mixed together with woodwaste and other debris. They would then have it hauled away and put down a new load. Beginning in 1978, the six logyards involved in this suit hauled the slag/woodwaste to the B & L Landfill.

In 1980, the Environmental Protection Agency ("the EPA") found high concentrations of heavy metals in water runoff from one of the Murray-Pacific logyards. The EPA turned its findings over to the Washington Department of Ecology ("the WDOE"). The WDOE determined that slag was the likely cause of the contamination. Over the course of the next several years the WDOE sent letters, made phone calls, and held meetings with representatives of the affected sites, but it took no formal action. In 1986, WDOE began formally requiring cleanups. This case concerns who will bear the cost of these cleanups.[1]

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[1] All of the sites listed below were contaminated by slag produced by ASARCO:

Louisiana-Pacific site: Owned and operated by Louisiana-Pacific.

Portac site: Owned by the Port of Tacoma; operated by Portac.

The first party to file suit was Louisiana-Pacific Corp. ("Louisiana-Pacific"). It sued ASARCO for response costs for the cleanup of its logyard and for contribution or indemnity for its liability for the cost of cleanup of the B & L Landfill. It brought the suit under CERCLA. ASARCO counter-claimed against Louisiana-Pacific under CERCLA and state law.

ASARCO also brought third-party claims against several other logyards that had disposed of slag/woodwaste mix at the B & L Landfill. It also sued William Fjetland, the owner and operator of B & L Landfill and B & L Trucking (which had transported the mix), and L-Bar Products, Inc. ("L-Bar"), which had bought assets of Industrial Mineral Products ("IMP"), the parent company of Black Knight. Some of these third-party defendants then counter-claimed against ASARCO asserting claims under CERCLA, the HWMA, the MTCA, and the WPLA. These parties also asserted common-law claims against ASARCO. The common-law claims included trespass, nuisance, negligence, negligent misrepresentation, fraud and breach of warranty.

The Port, which owned some of the logyard sites, then sued ASARCO for response costs under CERCLA and state law, and for indemnity and contribution for cleaning up the B & L

Wasser & Winters site: Owned by the Port of Tacoma; operated by Wasser & Winters.

Cascade Timber site: Owned by the Port of Tacoma; operated by Cascade Timber.

Murray-Pacific #1 Site: Owned and operated by Murray-Pacific.

Murray-Pacific #2 Site: Owned by the Port of Tacoma; operated by Murray-Pacific.

B & L Landfill site: Owned and operated by Fjetland. Contaminated by ASARACO slag dumped after use as ballast by Louisiana-Pacific. Portac, Wasser & Winter, Cascade Timber and Murray-Pacific. Eagle Trucking and B & L Trucking, both owned by Fjetland, transported the slag to the landfill.

With the exception of the B & L Landfill, all the sites are logyards.

Landfill. ASARCO filed counter-claims and cross-claims. Later ASARCO amended its third-party complaint in the Louisiana-Pacific action to include claims against another Fjetland company and IMP.[2]

On ASARCO's motion, the district court dismissed all the state common-law claims except trespass, on the ground that they were preempted by the WPLA. It also dismissed the MTCA claims because at that time the MTCA did not provide for a private cause of action.[3] Finally, the court dismissed ASARCO's claims against IMP and L-Bar.[4] The remaining state law claims (HWMA, WPLA and trespass) were tried to a jury. The CERCLA claims were tried to the court.

The jury found ASARCO liable to each plaintiff on both the WPLA and HWMA claims. The jury found no liability for trespass. The district court found ASARCO liable under CERCLA.

In the damage phase of the trial, the jury found ASARCO between 75% and 100% liable under state law for the cleanup costs at the various sites. The court found ASARCO between 79% and 100% liable for the cleanup costs at the sites under CERCLA. The court's assessment of comparative fault under CERCLA was higher for each site than the jury's state law assessment. The court then used the respective percentages to compute ASARCO's liability under state law and CERCLA for the Portac site, where remedial actions had been completed. It also awarded attorney fees under both CERCLA and the HWMA,

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[2] The suit begun by Louisiana-Pacific was consolidated with the one begun by the Port. The six logyards and the Port were realigned as plaintiffs with ASARCO as the only defendant. Fjetland and his companies remained third-party defendants. For the most part, the various plaintiffs act in concert in this appeal.

[3] As discussed in following Part IV, the district court's holding on the MTCA claims was correct at the time. After oral argument in this appeal, however, the Washington legislature amended the MTCA to provide a private, and retroactive, cause of action. Act of May 12, 1993 ch. 70.105D 1993 Wash. Laws Reg. Sess., Subst. Senate Bill no. 5404, sec. 1.

[4] The claims against IMP and L-Bar are the subjects of separate appeals.

and costs under both federal and state law. It reduced these fees and costs by the relevant comparative fault percentages. This appeal and cross-appeal followed.

I

CERCLA LIABILITY

ASARCO argues its liability to all plaintiffs under CERCLA should be reversed because slag contamination is excluded from CERCLA liability under the Bevill Amendment, and the jury's finding that slag is a product under the WPLA precluded a finding by the court that it was a waste under CERCLA. ASARCO further argues that the liability imposed on it for the cleanup of the Portac site should be reversed because the cleanup did not comply with the NCP. Finally, ASARCO argues that even if it is liable under CERCLA, the district court erred in awarding the plaintiffs attorney fees and costs.

A. Is slag a hazardous substance under CERCLA despite the Bevill Amendment reference in section 9601(14)(C)?

ASARCO contends that slag is excepted from the definition of "hazardous substance" under CERCLA, 42 U.S.C. § 9601(14). This section of the statute provides:

> The term "hazardous substance" means (A) any substance designated pursuant to Section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this tile, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 U.S.C.A. § 6921] *(but not including any waste the regulation of which under the Solid Waste Disposal Act [42 U.S.C.A. § 6901 et seq.] has been suspended by Act of Congress)*, (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act [42 U.S.C.A. § 7412], and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not

include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

42 U.S.C. § 9601(14) (1988) (emphasis added). It is the italicized exception, which is a reference to the "Bevill Amendment" to the Resource Conservation and Recovery Act of 1976, 42 U.S.C. § 6901 et seq. (1988) ("the RCRA"), on which ASARCO relies.[5]

[1] It is undisputed that slag is a material exempted from RCRA regulation under the Bevill Amendment. ASARCO contends the incorporation of this exemption into section 9601(14)(C) of CERCLA operates to except slag from CERCLA regulation as well. The EPA and the plaintiffs contend the exception in CERCLA § 9601(14)(C) merely prevents slag from being characterized as a hazardous substance under that particular subsection. They argue that if slag releases substances characterized as hazardous under subsections 9601(14)(A), (B), (D), (E) or (F), slag is subject to CERCLA regulation.

This is a question of first impression in this circuit. The D.C. Circuit in *Eagle-Picher Indus., Inc. v. United States EPA*, 759 F.2d 922 (D.C. Cir. 1985), concluded that the specific exception in subsection (C) applied only to that subsection and that mining wastes and fly ash were subject to CERCLA liability as hazardous substances under other subsections of section 9601(14). We agree with this approach.

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[5] The Bevill Amendment provides, in relevant part that

[n]otwithstanding the provisions of paragraph (1) of this subsection, each waste listed below shall, except as provided in subparagraph (B) of this paragraph, be subject only to regulation under other applicable provisions of Federal or State law in lieu of this subchapter until at least six months after the date of submission of the applicable study required to be conducted . . . and after promulgation of regulations in accordance with subparagraph (C) of this paragraph:

(i) Fly ash waste, bottom ash waste, *slag waste*, . . .

42 U.S.C. § 6921(b)(3)(A) (1988) (emphasis added).

[2] The district court found that slag's components include copper, lead, arsenic and zinc. These are hazardous substances under subsections (A), (B) and (D) of section 9601(14). *See* 40 C.F.R. § 302.4 (listing copper, arsenic, lead and zinc under CERCLA § 102); 40 C.F.R. § 401.15 (listing copper, arsenic, lead and zinc under Clean Water Act § 307); 40 C.F.R. § 116.4 (listing arsenic trioxide under Clean Water Act § 311).

[3] It is sufficient for CERCLA regulation that a substance is covered by any of the subsections of section 9601(14). *Eagle-Picher*, 759 F.2d at 930. The fact that slag is excepted from subsection (C) by the Bevill Amendment has no bearing on whether slag in its component forms is excepted from the other subsections. If it were to be so excepted, logically a more general exception applicable to all of the subsections, or at least to those that would encompass slag by including its components, would have been used. This is what Congress did when it excepted petroleum products from all of the subsections by the general exception at the end of section 9601(14) which provides:

> The term ["hazardous substance"] does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

42 U.S.C. § 9601(14) (1988).

Had Congress intended to except slag from CERCLA regulation as it did petroleum products, it easily could have done so. It did not. It is clear from the plain language and structure of section 9601 that the specific exception for slag in subsection (C) applies only to that subsection and that slag is regulated by CERCLA to the extent that it falls under any other subsection of section 9601(14).

ASARCO argues the meaning of section 9601(14) is not plain from its language, and that the legislative history demonstrates the statute's ambiguity. It points to Senate Report 96-848, a report on a draft of CERCLA. This report states in pertinent part:

> It should be noted that any substance or material for which regulation is specifically suspended by Act of

> Congress under the Solid Waste Disposal Act *is excluded from designation for the purpose of S. 1480, notwithstanding the presence in such substance of any hazardous or toxic chemical.*

Sen. Rep. No. 96-848, *reprinted in* The Environmental Law Institute, Superfund: A Legislative History, at 12 (emphasis added).

Assuming *arguendo* that section 9601(14) is ambiguous as ASARCO contends, any ambiguity has been laid to rest by the interpretation of the statute by the EPA, the agency charged with administering CERCLA.

> When a court reviews an agency's construction of [a] statute which it administers, it is confronted with two questions. First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; . . . . If, however, the court determines Congress has not directly addressed the precise question at issue, the court does not simply impose its own construction on the statute, as would be necessary in the absence of an administrative interpretation. Rather, if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute.

Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, 842-43 (1984).

ASARCO argues that under *INS v. Cardoza-Fonseca*, 480 U.S. 421, 445-49 (1987), a question of pure statutory construction entitles the agency charged with enforcing the statute to no deference. While *Cardoza-Fonseca* might be read for this broad proposition, such a reading could create a direct conflict with *Chevron*. Moreover, the Court has explained the relationship between the two cases. In *NLRB v. United Food & Commercial Workers Union, Local 23, AFL-CIO*, 484 U.S. 112, 123 (1987), it referred to both cases in determining the meaning of a statute without noting any conflict. It suggested that the result in *Cardoza-Fonseca* came from the first step of *Chevron*'s two-step analysis. It said that the first step was to try "to determine congressional intent, using 'traditional tools of statutory construction.'" *Id.* The court went on, however, to cite *Chevron*

for the proposition that if the first step failed, the agency's interpretation should be accepted if reasonable. *Id.*

The EPA has interpreted section 9601(14) to mean that the Bevill Amendment exception in subsection (C) refers only to that subsection. 48 Fed. Reg. 40663 (1983). The reasonableness of this interpretation is demonstrated by our analysis of what we have concluded to be the plain meaning of the statute. *See supra.*

ASARCO nonetheless argues we should hold that the EPA's interpretation of the statute is unreasonable because it would result in the complete nullification of the Bevill Amendment exception in subsection (C), an exception which specifically applies to slag. It points to the uncontradicted trial testimony of Dr. Twidwell, a doctor of metallurgical engineering with extensive experience. Dr. Twidwell testified that the components of all or virtually all Bevill Amendment wastes would fall under one of the other five categories of hazardous substances in section 9601(14). ASARCO argues Congress would not have enacted a meaningless provision of the statute. According to ASARCO, unless slag is entirely exempted from CERCLA by the Bevill Amendment exception in subsection (C), that exception is meaningless, because what the Bevill Amendment excepts from the statute in subsection (C) would be cancelled out by the inclusion of slag components in other subsection of section 9601.

ASARCO's argument is based on a false premise. It assumes that Congress meant for the statute to say something other than what it plainly says. What is clear is that Congress thought about an exemption for petroleum products and about hazardous wastes, including slag which is covered by the Bevill Amendment. Congress expressly provided a general exemption for petroleum products. It provided an exemption for slag only in subsection (C).

We hold that the specific exception for slag in subsection (C) of section 9601(14) of CERCLA applies only to that subsection and that slag and its components are regulated to the extent they fall within any of the other subsections of section 9601(14). Because the components slag leaches into the soil fall within at least one of the other subsections of section 9601(14), slag is regulated as a hazardous substance by CERCLA.

B. If slag is a "product" under the WPLA, may it also be a "waste" under CERCLA?

ASARCO contends that the jury's special verdict finding that slag was a "product" for purposes of the Washington Products Liability Act precludes the district court from finding that slag is a "waste" under CERCLA.

[4] Washington law defines a product as "any object possessing intrinsic value, capable of delivery either as an assembled whole or as a component part or parts, and produced for introduction into trade or commerce." Wash. Rev. Code Ann. § 7.72.010(3) (West 1992). The jury, by it special verdict, determined that slag fit this definition. CERCLA, on the other hand, imposes liability on "any person who . . . arranged for disposal or treatment . . . of hazardous substances owned or possessed by such person. . . ." 42 U.S.C. § 9607(3) (1988). The issue raised by ASARCO is whether the sale of slag to the logyards can simultaneously be both the sale of a product with intrinsic value in trade or commerce under Washington law, and the disposal of a hazardous substance under CERCLA. We conclude that it can.

The WPLA and CERCLA address different concerns. The WPLA is a codification of the common law of products liability, with such changes as the Washington legislature thought appropriate. CERCLA is a federal law designed to facilitate the cleanup of waste that threatens the environment. A by-product of a metallurgical process, if sold, can be a product for purposes of one and waste for purposes of the other. This is especially so given that CERCLA is to be broadly interpreted to achieve its remedial goals. *3550 Stevens Creek Assoc. v. Barclays Bank*, 915 F.2d 1355, 1363 (9th Cir. 1990), *cert. denied*, 111 S. Ct. 2014 (1991).

District courts have concluded that CERCLA liability is possible for the disposal of wastes that are also products. *See, e.g., United States v. Conservation Chem. Co.*, 619 F. Supp. 162, 240-41 (W.D. Mo. 1985) (sale of lime slurry and fly ash for cleanup of environmental site); *State of New York v. General Elec. Co.*, 592 F. Supp. 291, 297 (N.D.N.Y. 1984) (sale of used transformer oil to dragstrip for use in controlling dust); *United States v. A & F Materials Co., Inc.*, 582 F. Supp. 842, 844-45 (S.D. Ill. 1984) (sale of caustic solution to neutralize acidic oil).

In *A & F Materials*, the district court was faced with the question whether the sale of spent "caustic solution," a by-product of the manufacture of jet aircraft, could subject McDonnell Douglas to CERCLA liability. McDonnell Douglas was able to

sell the solution for 7.2¢ per gallon to A & F Materials which used it to neutralize acidic oil. *Id.* at 844. In deciding whether this was a waste disposal for CERCLA purposes, the court said "the definition of waste was intended to cover those hazardous materials which are of nominal commercial value and which were sometimes sold or reused and sometimes discarded." *Id.* The court concluded that the question whether the solution was a waste was a disputed issue of fact and that summary judgment was inappropriate. *Id.* at 845.

[5] Slag, like the caustic solution in *A & F Materials*, is at best a by-product. ASARCO's principal business is the smelting of copper. McDonnell Douglas's principal business is the manufacture of aircraft. Both slag and the caustic solution are by-products with a nominal commercial value. The logging companies paid $3.50 per ton for slag, and preferred it to gravel as a "ballast." Similarly, A & F paid 7.2¢ per gallon for the caustic solution and used it to neutralize acidic oils. Both by-products were materials their producers wanted to get rid of whether they could sell them or not. ASARCO had dumped slag in Commencement Bay for years before that means of disposal became infeasible. McDonnell Douglas paid to have the caustic solution hauled away after A & F stopped buying it. We conclude that the jury's finding that slag was a product under the WPLA did not preclude the court from finding it was a waste under CERCLA.[6]

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[6] ASARCO points to a number of cases in which courts have held that products were not waste for purposes of CERCLA or that sales were not disposal. *See, e.g., 3550 Stevens Creek Assoc. v. Barclays Bank*, 915 F.2d 1355 (9th Cir. 1990), *cert. denied*, 111 S. Ct. 2014 (1991); *Dayton Indep. School Dist. v. U.S. Mineral Products Co.*, 906 F.2d 1059 (5th Cir. 1990); *Florida Power & Light Co. v. Allis Chalmers Corp.*, 893 F.2d 1313 (11th Cir. 1990). These cases, however, involved products that were produced as the producers' principal business products, not by-products that the producers had to get rid of. Here, ASARCO's accounting manager responsible for devising a solution to the problem of slag accumulation described the dilemma facing ASARCO as follows: "Our life was hanging by a thread. There was a limited area for disposing of the slag. If you can't get rid of the slag, you are out of business."

C. The Portac Site and Substantial Compliance under the NCP

Whatever ASARCO's liability may be for cleanup costs at other sites, it contends it should not be liable for the cleanup costs that were incurred by the Port and Portac in cleaning up the Portac site. ASARCO argues the cleanup of that site was not handled as required by 42 U.S.C. § 9607(a)(4)(B) (1988), the relevant portion of the NCP. Specifically, it contends that the Port and Portac failed to con ly with the notice and comment provisions of the NCP before choosing a 30-inch gravel cap covered by 13 inches of compacted concrete spread over 30 acres, at a cost of nearly $5 million as the remedy for the Portac site.

40 C.F.R. § 300.67(d) (1985) provided that

> [i]n remedial actions . . . feasibility studies that outline alternative remedial measures must be provided to the public for review and comment for a period of not less than 21 calendar days. Such review and comment shall precede selection of the remedial response. Public meeting(s) shall, in most circumstances, be held during the comment period.[7]

The district court found that the NCP was substantially complied with. Both parties concede that under our decision in *Wickland* and *NL Indus.*, strict compliance is not required. *Wickland*, 792 F.2d at 891; *NL Indus.*, 792 F.2d at 898-99.

[6] Initially, the parties disagree as to what standard of review we should apply in determining whether the district court erred in deciding that the Port and Portac substantially complied with the NCP. We hold that the issue of substantial compliance is a mixed question of law and fact. Its resolution involves the application of the law to a set of facts. Our review is de novo. *Boone v. United States*, 944 F.2d 1489, 1492 (9th Cir. 1991). To the extent, however, that specific factual findings made by the district court are in question, we review for clear error. Fed. R. Civ. P. 52(a); *SEC v. American Principals Holding, Inc. (In re*

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[7] The NCP regulations applicable are those in effect at the time response costs are incurred. *Wickland Oil Terminals v. ASARCO, Inc.*, 792 F.2d 887, 891 (9th Cir. 1986); *NL Indus. v. Kaplan*, 792 F.2d 896, 898 (9th Cir. 1986). Here all parties concede that the 1985 regulations govern.

San Vicente Medical Partners Ltd.), 962 F.2d 1402, 1405 (9th Cir.), *cert. denied*, 113 S. Ct. 210 (1992).

[7] Compliance here was not perfect, but it was substantial. The Port held six Port Commission meetings at which the cleanup of the Portac site was on the agenda. The fourth and fifth of these meetings are the most important. They occurred after Hart Crowser prepared a feasibility study outlining cleanup options for the Portac site. The Port received the study on June 17, 1988. The cleanup plan was on the agenda and discussed in at least two later meetings, on August 11 and September 22, 1988. These meetings and their agendas were well advertised, open to the public, and more than 21 days apart. The Crowser study was available for public examination at the Port's office.

ASARCO contends the Port and Portac had already decided on the paving option before the August 11th meeting, and consequently they did not comply meaningfully with the notice and comment provisions of the NCP. ASARCO points to references to the "Portac Paving" in a request for Port Commission action, and a reference to an agreement to pave the site in a letter written by the Port's chief engineer on August 2, 1988. The district court considered at some length the question whether the decision to pave was made before September 22, 1988 and found:

> The final remedy was not chosen until the September meeting, as I understand what's before me. Certainly, from way back in the spring, the parties were pointing at paving, but it seems to me they were pointing at paving because that, from the beginning appeared to be the most likely result of this study. The evidence does not support the idea here, in my view, that all other alternatives were rejected out of hand before they were even made or when they were first made unreasonably in some way. I think ASARCO reads into some tentative decision and tentative conclusions something that is not really there.
>
> As I say, there is nothing wrong with focusing on what appears to be the best remedy early on, so long as you don't make the decision until the time for decision. That decision was not finally made until the September '88 Port meeting.

The district court's finding that the final decision on paving was not made until September 22, 1988 is a finding of fact which is not clearly erroneous. We have reviewed de novo the applicable law and the question of substantial compliance. We hold that the Port and Portac substantially complied with the NCP.

D. Did the district court err in awarding attorney fees and litigation expenses under CERCLA?

[8] The district court awarded the plaintiffs their attorney fees and litigation expenses under CERCLA. After this appeal was filed, we held that attorney fees are not recoverable under CERCLA. *Stanton Road Ass'n v. Lohrey Enter.*, 984 F.2d 1015, 1020 (9th Cir. 1993). The Supreme Court recently held the same, except for attorney fees "closely tied to the actual cleanup." *Key Tronic Corp. v. United States*, 114 S. Ct. 1960, 1967 (1994).

Neither we nor the Supreme Court decided the question whether litigation expenses over and above the expenses recoverable under 28 U.S.C. §§ 1821(b) and 1920 may be recovered in a CERCLA action. *But see Key Tronic*, 114 S. Ct. at 1967 n.14. In the present case, the district court's award of litigation expenses totalled $436,705.31. This award included such items as travel, lodging, expert witness fees, long distance telephone calls and meals.

"[T]he full extent of a federal court's power to shift litigation costs absent express statutory authority to go further" is defined by 28 U.S.C. §§ 1821(b) and 1920. *West Virginia Univ. Hosp., Inc. v. Casey*, 499 U.S. 83, 86 (1991). Unless CERCLA permits the recovery of litigation expenses in excess of those recoverable under 28 U.S.C. §§ 1821(b) and 1920, the district court exceeded its authority in making its litigation expense award.

CERCLA authorizes private parties to recover "necessary costs of response . . . ." 42 U.S.C. § 9607(a)(4)(B). CERCLA defines "response" as including "enforcement activities." *Id.* at § 9601(25). The plaintiffs argue that a private cost recovery action is an enforcement activity, making litigation expenses recoverable response costs. We disagree.

[9] *Key Tronic* is instructive. There, in holding that attorney fees are not recoverable for bringing a cost recovery action under CERCLA, the court stated that the phrase "enforcement activities" should not be construed "as encompassing the kind of private cost

recovery action at issue in [that] case." *Key Tronic*, 114 S. Ct. at 1967. As in *Key Tronic*, the present litigation involves a private cost recovery action under CERCLA. Because bringing this litigation cannot be classified as an "enforcement activity" under CERCLA, the district court exceeded its authority to the extent its award of litigation costs exceeded those costs recoverable under 28 U.S.C. §§ 1821(b) and 1920.

II

HWMA LIABILITY

ASARCO challenges the imposition of liability under Washington's Hazardous Waste Management Act. While the award of cleanup costs under the HWMA is no longer in issue, because it is subsumed within the CERCLA award we have upheld, both attorney fees and prejudgment interest were awarded under the HWMA. ASARCO's liability for these items, attorney fees and prejudgment interest, is dependent on its liability under the HWMA.

ASARCO contends the judgment rendering it liable under the HWMA should be reversed. It argues the district court erred in refusing to grant its motion for summary judgment. The motion was based on the ground the the HWMA did not provide for a private cause of action at the time of the slag sales, and the amendment creating the private cause of action is not retroactive. It also argues the district court should have granted its motion for summary judgment because the jury's finding that slag was a product under the WPLA precluded a finding that it was also a hazardous waste under the HWMA. ASARCO contends that even if we reject the previous two arguments, we should reverse the HWMA awards and remand for new findings because the district court erred by denying its motion for a directed verdict based on the state statute of limitations; using Washington's 1984 regulations to instruct the jury; refusing to admit evidence that the plaintiffs violated the federal Clean Water Act; refusing to instruct the jury that the plaintiffs' violation of the WPCA was evidence of negligence; and giving erroneous jury instructions under the HWMA.

[10] Because we conclude the amendment to the HWMA that created a private cause of action may not be applied retroactively, we reverse the attorney fees and prejudgment interest awards under the HWMA and do not reach the other HWMA issues.

In applying the amendment retroactively, the district court relied on *Haddenham v. State of Washington*, 550 P.2d 9 (Wash. 1976). In *Haddenham*, the family of two murder victims sued the State of Washington for negligently administering a sexual psychopath program from which the murderer escaped. The Washington Supreme court considered whether the statute applied retroactively to preempt the plaintiffs' tort suit. *Id.* at 12. It stated: "Statutes normally will be construed to operate prospectively only, unless a contrary intent appears . . . . Where, however, a statute is remedial and its remedial purpose is furthered by retroactive application, the presumption favoring prospective application is reversed." *Id.* at 12.

The HWMA, and particularly the private-cause-of-action amendment, Wash. Rev. Code Ann. § 70.105.097, are remedial. Nevertheless, we decline to extend the *Haddenham* reasoning to the HWMA.

[11] The statute at issue in *Haddenham* did not become effective until approximately six months after the murder, but it provided for benefits to victims of crimes "on or after January 1, 1972" which was well before the murders. *Id.* The Washington court was at least encouraged in its conclusion by this provision of the statute. *Id.* There is no such retroactivity provision in the private-cause-of-action amendment to the HWMA.

Moreover, by "remedial" we do not understand the Washington Supreme Court to have meant that retroactive application will be given to any statute that creates a remedy for some harm. The statute at issue in *Haddenham* was remedial in a different way from the amendment to the HWMA that created a private cause of action. In *Haddenham*, the Crime Victims Compensation Act, the statute in question, created "a comprehensive compensation plan for victims of crime incorporating the workmen's compensation benefit schedule." *Id.* at 11. The statute provided a public remedial scheme by which a recovery could be made against the state.

The amendment to the HWMA created a private cause of action for damages. Retroactive application of a public remedial scheme for recovery of compensation from the state does not affect private obligations as does a statute that creates a private liability for a private cause of action where none existed before. When a public remedial scheme is made retroactive, the legislature retroactively imposes liability on itself. When, in contrast, a new private cause of action is made retroactive, the

legislature retroactively imposes liability on private parties. Thus, a court's inference that a public remedial scheme is intended to apply retroactively is much more reasonable than its inference that a new private cause of action is intended to apply retroactively.

Finally, we have held that the private cause of action under the RCRA, a federal statute analogous to the HWMA which the plaintiffs concede should be used to interpret the HWMA, does not apply retroactively. *Ascon Properties, Inc. v. Mobil Oil Co.*, 866 F.2d 1149, 1159 (9th Cir. 1989).

We conclude that the private-cause-of-action amendment to the HWMA does not apply retroactively.

The plaintiffs argue nonetheless that slag continues to leach hazardous substances into the soil, that this is an ongoing injury and that judgment was appropriately entered against ASARCO under the HWMA for this injury. We reject this argument.

No court has allowed a recovery for an ongoing injury under the HWMA. Cases that have allowed a recovery for ongoing contamination have done so under 42 U.S.C. § 6973(a) (1988), the provision of RCRA that gives the EPA administrator the power to enjoin persons from contributing to ongoing contamination. *See United States v. Northeastern Pharmaceutical & Chemical Co., Inc.*, 810 F.2d 726, 740 (8th Cir. 1986), *cert. denied*, 484 U.S. 848 (1987); *United States v. Price*, 523 F. Supp. 1055, 1070-71 (D.N.J. 1981), *aff'd*, 688 F.2d 204 (3d Cir. 1982).

The provision of the HWMA at issue here is the private cause of action provision, more analogous to 42 U.S.C. § 6972 (1988). Cases addressing the ongoing violation theory under the provision have required that to be an ongoing violator, a defendant must own, or perhaps control, the property where seepage is taking place. *Cf. Fallowfield Dev. Corp. v. Strunk*, 1990 U.S. Dist. LEXIS 4820 (E.D. Pa.) (allowing RCRA cause of action where plaintiffs offered to show that defendants retained equitable ownership of property because its recent sale was fraudulent); *Coburn v. Sun Chem. Corp.*, 1988 U.S. Dist. LEXIS 12548 (E.D. Pa.) (denying RCRA cause of action because plaintiff no longer owned property).

[12] The plaintiffs cite no section 6972 case imposing ongoing liability for a nonowner, and we have found none. ASARCO does not own or control the properties from which the

slag/woodwaste mixture continues to leach hazardous substances. Because ASARCO would not be subject to a private RCRA suit for an ongoing violation, and because we look to RCRA in interpreting Washington's HWMA, we conclude that ASARCO has no liability for an "ongoing violation" under the HWMA, and we reverse the judgment against it for attorney fees and prejudgment interest under that statute.

III

WPLA CLAIMS

ASARCO contends that we should reverse and remand the award of damages under the Washington Products Liability Act ("the WPLA"). It argues that the district court erred by rejecting its motion to dismiss on statute of limitations grounds; refusing to admit evidence of the plaintiffs' violation of the Clean Water Act; refusing to instruct the jury that the plaintiffs' violations of the WP[L]A was evidence of negligence; and giving erroneous HWMA jury instructions which impacted the comparative fault calculations. In addition, ASARCO contends that loss-of-use damages were improperly awarded under the WPLA because they are not available as a matter of law. We address the last of these contentions first.

A. Did the district court err in allowing Portac to recover damages for loss of use under the WPLA?[8]

[13] We agree with ASARCO that the WPLA precludes a recovery of damages for loss of use of property. *Washington Water Power Co. v. Graybar Elec. Co.*, 774 P.2d 1199, 1205 (Wash. 1989), *amended* 779 P.2d 697.

In *Washington Water Power co.*, the Washington Supreme Court analyzed the provision of the WPLA that defines "harm" as "any damages recognized by the courts of this state: *Provided*, That the term 'harm' does not include direct or consequential economic loss under Title 62A RCW." Wash. Rev. Code Ann. § 7.72.010(6) (West 1992). While *Washington Water Power Co.*

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[8] The plaintiffs argue that ASARCO waived this argument by not raising it at trial. A review of the record shows, however, that ASARCO orally objected to loss-of-use damages. In addition, in its briefs in the district court it argued that economic damages were not recoverable under the WPLA.

is not directly on point because it dealt with what damages are available when a defective product harms only itself, some of the court's dicta is instructive.

First, the court noted that the WPLA was intended to "restrict product liability plaintiffs to contract remedies for economic loss." *Washington Water Power*, 774 P.2d at 1205. The damages at issue here, for loss of use of a site, resemble contract theory consequential damages. *See* Wash. Rev. Code Ann. § 62.A.2-715(2). More important, however, the Washington Supreme Court noted approvingly that "[t]he common understanding of Washington commentators is that the WPLA also . . . overrul[es] this court's decision in *Berg v. General Motors Corp.*, 87 Wash. 2d 584, 555 P.2d 818 (1976)." *Washington Water Power*, 774 P.2d at 1205 (footnote omitted). *Berg* involved damages indistinguishable in nature from the damages here. In *Berg*, a fisherman had purchased an engine which broke down repeatedly. *Berg*, 555 P.2d at 819. He sued requesting, among other things, the profits he lost as a result of his boat's downtime. The Washington Supreme Court held that the fisherman had a product liability cause of action for these loss-of-use damages. *Id.* at 822-25.

If *Berg* is an example of the sort of damages the WPLA made unrecoverable in a tort action, the loss-of-use damages here are not recoverable under that statute. As in *Berg*, this case involves (for WPLA purposes) the sale of a defective product, slag. Also as in *Berg*, the harm that resulted prevented the plaintiff from operating his normal business, here a logyard. *Berg* allowed loss-of-use damages, essentially lost profits that would have been earned if the boat had been running. Here Portac asks for similar damages for loss of use of the site, lost profits and costs associated with shifting operations to other sites. The WPLA overruled *Berg*. It precludes the loss-of-use damages awarded here.

B. Remaining Damages Under the WPLA

Except for the damages awarded to Portac for loss of use of the Portac site, all damages awarded under the WPLA are subsumed within the CERCLA award which we have upheld. Nevertheless, we must determine whether the WPLA damage awards were proper, because the district court awarded the plaintiffs prejudgment interest on these awards at the state law rate, which is greater than the federal rate.

ASARCO challenges the WPLA damage awards on the ground that the WPLA claims are barred by the applicable three-year statute of limitations.

The first lawsuit against ASARCO was filed by Louisiana-Pacific on May 11, 1988. The district court determined that the WPLA causes of action did not accrue until 1986, when the Washington Department of Energy ("WDOE") notified the various plaintiffs that they had to clean up their properties. The district court concluded the WPLA claims were not barred by the statute of limitations.

ASARCO argues the statute of limitations began to run when the plaintiffs first discovered, or should have discovered, their properties were damaged by ASARCO's slag. There was evidence the plaintiffs had meetings with, and calls and letters from, the WDOE concerning the contamination of their properties from slag as early as 1981.

We look to Washington state law to determine when the statute of limitations began to run on the WPLA claims. In *North Coast Air Serv., Ltd. v. Grumman Corp.*, 111 Wash. 2d 315, 759 P.2d 405 (1988), the Washington Supreme Court held that in products liability actions, a cause of action accrues when a claimant discovers, "or in the exercise of due diligence should have discovered, a factual causal relationship of the product to the harm." *Id.* at 319, 759 P.2d at 407. Stated differently, the statute of limitations begins to run when a claimant first learns, or should have learned, of the essential elements of the possible cause of action. *Rose v. A.C. & S., Inc.*, 796 F.2d 294, 296 (9th Cir. 1986); *Ohler v. Tacoma General Hosp.*, 92 Wash. 2d 507, 511, 598 P.2d 1358, 1360 (1979). Where a claimant "has notice of facts sufficient to prompt a person of average prudence to inquire," the claimant "is deemed to have notice of all facts which reasonable inquiry would disclose." *Virgil v. Spokane County*, 42 Wash. App. 796, 800, 714 P.2d 692, 695 (1986). Just when a claimant knows or should know the elements of its cause of action is a question of fact. *North Coast Air*, 111 Wash. 2d at 319, 759 P.2d at 407.

The essential elements of a products liability claim under Washington law are duty, breach of duty, causation, and damage or injury. *Rose*, 796 F.2d at 296; *Hibbard v. Gordon, Thomas, Honeywell, Malanca, Peterson and O'Hearn*, 118 Wash. 2d 737, 747, 826 P.2d 690, 695 (1992); *Ohler*, 92 Wash. 2d at 511, 598 P.2d at 1360. Here, the district court held that the statute of

limitations began to run when the DOE ordered the plaintiffs to clean up their properties, not when they first learned their properties were contaminated by ASARCO's slag. The district court reasoned that until the plaintiffs were required to incur response costs, they were unaware of the damages they had suffered under the WPLA and of the injury to their properties. We disagree.

In assessing the damage element, the statute of limitations begins to run when the claimant first discovers, or should have discovered, some damage, not necessarily the full extent of the damage:

> "Where an injury, although slight, is sustained in consequence of the wrongful act of another, and the law affords a remedy therefor, the statute of limitations attaches at once. It is not material that all the damages resulting from the act shall have been sustained at that time, and the running of the statute is not postponed by the fact that the actual or substantial damages do not occur until a later date." [citations omitted]

Steele v. Organon, Inc., 43 Wash. App. 230, 234, 716 P.2d 920, 922 (1986). *See also Zaleck v. Everett Clinic*, 60 Wash. App. 107, 802 P.2d 826 (1991).

The full extent of damage or loss need not be known, so long as the claimant is aware of some injury; "it is uncertainty as to the *fact* of damage, rather than its *amount*, which negatives the existence of a cause of action. Moreover, neither the speculative nor uncertain character of damages nor the difficulty of proof will toll the period of limitation." *Steele*, 43 Wash. App. at 235, 716 P.2d at 923; *see also Zaleck*, 60 Wash. App. 107 (plaintiff suffered damage sufficient to trigger the limitations period when his thumb became numb following an injection, not when he later learned he had suffered a permanent partial disability in his thumb).

Although no Washington case has decided this issue in the context of contaminated property, other courts have concluded that an injury to property occurs when a landowner first learns its property is contaminated. In *Edward Hines Lumber Co. v. Vulcan Materials Co.*, 669 F.Supp. 854 (N.D. Ill., 1987), Hines Lumber filed suit for CERCLA and common law negligence and product liability damages against a variety of defendants. *Id.* at 855. All defendants sold chemicals to Hines Lumber which it

used in wood treatment and processing. *Id.* at 855-56. The chemicals allegedly caused environmental damage and Hines sued for its expected future damages. *Id.* Among other things, the defendants contended Hines failed to file suit within the state law statute of limitations. Although no costs of clean up had yet been incurred, Hines had sold the property and suffered a diminution of its value as a result of its contamination. The district court ignored the fact that no response costs had been incurred, and looked exclusively to the time Hines first learned its property had been damaged, to determine when its state causes of action accrued. *See also Montana Pole & Treating Plant v. I.F. Laucks and Co.*, 755 F.Supp. 1339 (D. Mont. 1991) (statute of limitations commenced when owners knew waste preservative caused environmental damage, not when EPA seized the property); *CAMSI v. Hunter Technology Corp.* 230 Cal. App. 3d 1525, 282 Cal. Rptr. 80 (1991).

We find the reasoning of these cases persuasive and apply it to the WPLA claims of the landowners. Here, the landowners knew their properties were damaged when they first began receiving notices from the WDOE. They obviously knew at that time the values of their properties were likely diminished, regardless of future clean up costs the WDOE might require.

[14] We conclude the landowners' claims under the WPLA accrued when they became aware, or should have become aware, of the contamination of their properties. It is uncertain when this occurred, although ASARCO contends it occurred as early as 1981. This is a factual question which should be addressed on remand.

The statute of limitations analysis for the lessees' WPLA claims differs somewhat. Under Washington law, only "actual and appreciable harm" triggers the limitations period. *Steele*, 43 Wash. App. at 233, 716 P.2d at 922. Unlike landowners, lessees do not necessarily suffer actual and appreciable harm when the market value of the underlying fee is diminished by contamination. A lessee of property may be able to enjoy the full intended use of the unexpired leasehold estate despite contamination. Whether a lessee suffers actual and appreciable harm as a result of contamination may depend upon such variables as the length of the unexpired term of the leasehold estate, whether the lessee has rights of assignment and subletting, the extent of the contamination as it affects the lessee's use of the property and other relevant considerations. We cannot determine from the record before us whether the lessees here suffered actual

and appreciable harm and if they did when that occurred. Accordingly, we remand to the district court the question whether the lessees suffered actual and appreciable harm as a result of the contamination, and if so when the statute of limitations periods began to run for each of the lessees who suffered such harm.

We do not reach the question whether the WPLA damages sought by the plaintiffs are sufficiently liquidated to support an award of prejudgment interest under Washington law.

ASARCO also argues that the district court erred in finding the Port of Tacoma immune from the effect of the statute of limitations by virtue of its status as a sovereign entity. ASARCO contends the Port acted in a proprietary manner in leasing the logyards. Under Washington law, a statute of limitations does not run against a sovereign entity when actions are "brought in the name or for the benefit of the state . . . ." RCW 4.16.160.

"[M]unicipal actions are 'brought for the benefit of the state' when those actions arise out of the exercise of powers traceable to the sovereign powers of the state which have been delegated to the municipality." *Washington Public Power Supply System v. General Elec. Co.*, 113 Wash. 2d 288, 293, 778 P.2d 1047, 1049 (1989) (en banc). In determining whether the Port's activity was sovereign or proprietary, "we may look to constitutional or statutory provisions indicating the sovereign nature of the power, and we may consider our traditional notions of powers which are inherent in the sovereign. Relevant to this analysis are the general powers and duties under which the municipality acted, the purpose of those powers, and whether the activity or its purpose is normally associated with private or sovereign concerns." *Id.* at 296, 778 P.2d 1051.

[15] Applying these criteria to the case at hand, we hold that the Port of Tacoma acted in a sovereign capacity in leasing the logyards. The Washington Constitution provides that areas designated by the port commission, up to 2000 feet from the harbor line, "shall be reserved for landings, wharves, streets, and *other conveniences of navigation and commerce.*" Wash. Const. Art. XV, § 1 (emphasis added). The Constitution also specifically provides for the leasing of these areas. *Id.* at § 2. We read the phrase "other conveniences of navigation and commerce" to include logyards. Washington statutory law also contemplates the development of "commercial transportation, transfer, handling, storage and terminal facilities, and industrial improvements" by the port districts. RCW 53.04.010. The port

districts may lease these properties "for such purposes and upon such terms as the port commission deems proper." RCW 53.08.080.

[16] Furthermore, we find it important that in leasing the property and Port did not act as a private party would act, leasing the land to any party offering the best terms. Instead the Port leased the property for logyards and subject to certain conditions designed to further harbor development. In leasing the logyards, the Port implemented part of its comprehensive harbor improvement plan. Non-monetary concerns motivated the Port in leasing the property, supporting the Port's contention that the action was more sovereign than proprietary. Because the Port acted in its sovereign capacity in leasing the logyards, the statute of limitations does not run against it.

IV

MTCA LIABILITY

[17] The plaintiffs, with the exception of Louisiana-Pacific,[9] argue we should reverse the district court's dismissal of their claims under the Washington Model Toxics Control Act, Wash. Rev. Code Ann. § 70.105D.010 et seq. (Amended 1993). The district court dismissed the MTCA claims because it concluded the MTCA did not crate a private cause of action, a holding which was later confirmed by the Washington Supreme Court. *See Bird-Johnson Corp. v. Dana Corp.*, 833 P.2d 375 (Wash. 1992). During the pendency of this appeal, the Washington legislature amended the MTCA to overturn *Bird-Johnson*. The plaintiffs brought this to our attention as authorized by Federal Rule of Appellate Procedure 28(j). Pursuant to our order, the parties filed supplemental briefs addressing the question whether the recent amendment to the MTCA should be applied retroactively to permit the plaintiffs to pursue their MTCA claims.

The amended statute provides that

> Except as provided in RCW 70.105D.040(4)(d), a person may bring a private right of action, including a claim for contribution or for declaratory relief, against any other person liable under RCW 70.105D.040 for the recovery

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[9] Louisiana-Pacific did not allege a claim under the MTCA in the district court.

> of remedial action costs . . . . Remedial action costs shall include reasonable attorneys' fees and expenses . . . . This section applies to all causes of action regardless of when the cause of action may have arisen. To the extent a cause of action has arisen prior to the effective date of this act, this section applies retroactively, but in all other respects it applies prospectively.

Act of May 12, 1993 ch. 70.105D 1993 Wash. Laws Reg. Sess., Subst. Senate Bill no. 5404, sec. 1.

[18] The amended MTCA clearly creates a private right of action, and makes it retroactive to cover harms that have already occurred. ASARCO argues that the MTCA amendment was not intended to be retroactive to cases already decided by the trial court and pending on appeal. We reject this argument. When the legislature determines that the policy underlying a statute is so important that the statute will be applied retroactively, there is no logical reason not to apply the statute to cases currently before the court. Moreover, the general rule in Washington is that statutes that are retroactive apply to pending litigation. *See, e.g., Seek Sys., Inc. v. Scully-Walton, Inc.*, 777 P.2d 560, 562 (Wash. App. 1989), and the law applicable on appeal is the law at the time the appellate court issues its decision. *Bradley v. Richmond School Bd.*, 416 U.S. 696, 711 (1974); *DeGurules v. I.N.S.*, 833 F.2d 861, 863 (9th Cir. 1987). The amended statute, therefore, provides a private cause of action to the plaintiffs.

ASARCO contends the plaintiffs have waived any right to assert claims under the MTCA because they failed to argue in their appellate briefs (except in the supplemental briefing which we ordered) that the district court erred in dismissing their MTCA claims. We reject this argument.[10]

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[10] ASARCO also argues that because the district court's dismissal of the MTCA claims was a "final" order, claim preclusion applies and prevents the plaintiffs from re-raising these claims on appeal. This argument lacks merit. The district court's dismissal order was "final" for purposes of appeal. The plaintiffs timely filed notices of appeal from that order. The question is not one of claim preclusion but rather whether the plaintiffs waived their right to appeal from the dismissal of their MTCA claims by not challenging that dismissal in their initial briefs filed with this court.

In *DeGurules*, we considered substantially the same question. There, the INS relied on *I.N.S. v. Phinpathya*, 464 U.S. 183 (1984), in ruling that petitioners were deportable because they had not met 8 U.S.C. § 1254(a)(1)'s seven-year strictly continuous physical presence requirement. Before we issued our decision in *DeGurules*, however, Congress overturned *Phinpathya* by amending section 1254 to provide that "brief, casual, and innocent" absences from the United States would not prevent a finding that presence was continuous. 8 U.S.C. § 1254(b)(3). Even though the petitioners had not argued on appeal that they could be allowed "brief, casual, and innocent" absences, we held that they had not waived this argument. *DeGurules*, 833 F.2d at 863. We applied the new law retroactively. *Id.* at 864.

The *DeGurules* analysis applies with equal force here. The plaintiffs filed timely notices of appeal from the district court's dismissal of their MTCA claims, but when the propriety of the district court's ruling was confirmed by the Washington Supreme Court in *Bird-Johnson*, they did not challenge the district court's ruling in their appellate briefs. At the time it would have been foolish for them to do so. When the Washington legislature changed the law, however, the plaintiffs promptly brought this to our attention, we ordered supplemental briefing, and both sides have now had a full and fair opportunity to brief the merits of their respective positions.

In these circumstances, we conclude the plaintiffs have not waived the right to challenge the dismissal of their MTCA claims. The district court dismissed those claims on the sole ground that the MTCA did not provide a private right of action. The district court did not consider the merits of the claims or whether there was any other impediment to the plaintiff's pursuing them. If the plaintiffs are entitled to prevail on their MTCA claims, attorney fees are recoverable.

We reverse the district court's dismissal of the MTCA claims. We remand to it the question whether the plaintiffs are entitled to prevail on those claims and, if so, what damages, attorney fees, prejudgment interest and other recovery they may be entitled to.

V

PLAINTIFFS' OTHER CROSS-APPEALS

In their cross-appeal, the plaintiffs argue that the district court erred in reducing the amount of attorney fees awarded to them under CERCLA. Attorney fees for bringing a cost recovery action are not recoverable under CERCLA. *Key Tronic,* 114 S. Ct. at 1967; *Stanton Road,* 984 F.2d at 1020. This contention is moot.

The plaintiffs also contend the district court should not have dismissed their common-law nuisance claims. The plaintiffs base these claims on allegations of negligent and intentional conduct. While the WPLA broadly preempts many common-law remedies, it expressly excludes claims based on "intentionally caused harm." Wash. Rev. Code Ann. § 7.72.010(4) (West 1992). This exclusion applies to the plaintiffs' intentionally caused nuisance claim. The WPLA preempts the plaintiffs' common-law nuisance claim based on allegations of negligent conduct, but it does not preempt the common-law nuisance claim based on allegations of intentional conduct.

Nor are damages which may be recoverable on the intentional nuisance claim subsumed within the CERCLA recovery. Washington law provides for the recovery of "the loss of use or of income [from the land] for a reasonable time pending such restoration." *Colella v. King County,* 433 P.2d 154, 158 (Wash. 1967). On remand the district court should determine whether ASARCO's conduct constituted an intentional nuisance under Washington law and, if so, what damages are recoverable.

CONCLUSION

We affirm the district court's awards of damages under CERCLA. We reverse the district court's awards of attorney fees under CERCLA, and its award of litigation expenses to the extent its award included items not recoverable as costs under 28 U.S.C. §§ 1821(b) and 1920. We also reverse the finding of liability under the HWMA, and the award under it of cleanup costs, attorney fees, costs, and prejudgment interest. We remand to the district court the question whether the plaintiffs' claims under the WPLA are barred by the statute of limitations, and if not, whether the plaintiffs' claims under the WPLA are sufficiently liquidated to support an award of pre-judgment interest under Washington law. We affirm the district court's ruling that the

statute of limitations does not run against the Port of Tacoma. We reverse the district court's dismissal of the MTCA claims and remand those claims to the district court for further proceedings consistent with this opinion. We reverse the award of loss-of-use damages under the WPLA. We do not reach the award of damages and costs under the WPLA because they are subsumed within the CERCLA award which we uphold. We remand to the district court the issue whether ASARCO's conduct constituted an intentional nuisance and, if so, what damages are recoverable.

The plaintiffs/appellees shall recover two-thirds of their costs on appeal from ASARCO. The parties shall otherwise bear their own costs on appeal.

AFFIRMED in part, REVERSED in part, and REMANDED in part.

APPENDIX C

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LOUISIANA-PACIFIC CORPORATION; PORT OF TACOMA,

Plaintiffs-Appellees,

v.

ASARCO INCORPORATED,

Defendant-Third-Party Plaintiff-Appellant.

v.

WILLIAM FJETLAND; B & L TRUCKING AND CONSTRUCTION CO., INC.; INDUSTRIAL MINERAL PRODUCTS, INC.; MURRAY PACIFIC CORPORATION; PORTAC, INC.; CASCADE TIMBER COMPANY; EXECUTIVE BARK INC.; WASSER & WINTERS COMPANY; EAGLE TRUCKING, INC.

Third-Party Defendants/ Appellees,

No. 92-35061

D.C. No. CV-88-00217-RJB

ORDER

LOUISIANA-PACIFIC CORPORATION,

Plaintiff,

v.

CASCADE TIMBER COMPANY,

Third-Party Defendant/
Counter-claimant/Appellant,

v.

ASARCO INCORPORATED,

Defendant-Third-Party
Plaintiff/Appellee,

WILLIAM FJETLAND; B & L TRUCKING AND CONSTRUCTION CO., INC.; INDUSTRIAL MINERAL PRODUCTS, INC.; MURRAY PACIFIC CORPORATION; PORTAC, INC.,

Third-Party Defendants,

No. 92-35144

D.C. No.
CV-88-00217-TB

LOUISIANA-PACIFIC CORPORATION; PORT OF TACOMA, Plaintiffs, PORTAC, INC., Third-Party Defendant/ Counter-Claimant/Appellant, v. ASARCO INCORPORATED, Defendant-Third-Party Plaintiff/Appellee, WILLIAM FJETLAND, et al., Third-Party Defendants.	No. 92-35145 D.C. No. CV-88-00217-TB

LOUISIANA-PACIFIC CORPORATION;

Plaintiffs,

v.

MURRAY PACIFIC CORPORATION,

Third-Party Defendant/
Counter-Claimant/Appellant,

v.

ASARCO INCORPORATED,

Defendant/Third Party
Plaintiff/Appellee,

William Fjetland; B & L Trucking and Construction Co., Inc.; Industrial Mineral Products, Inc.,

Third-Party Defendants.

No. 92-35148

D.C. No.
CV-88-00217-TB

LOUISIANA-PACIFIC CORPORATION, PORT OF TACOMA, Plaintiffs, WASSER & WINTERS COMPANY, Third-Party Defendant/ Counter-Claimant/Appellant, v. ASARCO INCORPORATED, Defendant/Third-Party Plaintiff/Appellee, WILLIAM FJETLAND, et al., Third-Party Defendants.	No. 92-35149 D.C. No. CV-88-00217-RJB

LOUISIANA-PACIFIC CORPORATION, Plaintiff, and PORT OF TACOMA, Plaintiff-Appellant, v. ASARCO INCORPORATED, Defendant/Third-Party Plaintiff/Appellee.	No. 92-35152 D.C. No. CV-88-00217-TB ORDER

Before: WRIGHT, THOMPSON and KLEINFELD, Circuit Judges.

The panel has voted unanimously to deny all pending petitions for rehearing. Judges Thompson and Kleinfeld have voted to reject all pending suggestions for rehearing en banc, and Judge Wright so recommends.

The full court was advised of the suggestion for rehearing en banc, and no active judge of the court has requested a vote on whether to rehear the matter en banc.

The panel has voted to amend the opinion filed April 28, 1994. An order amending the opinion and an amended opinion are filed contemporaneously with the filing of this order.

ASARCO's motion, filed July 26, 1994 for loave [sic] to file a reply brief in support of its petition for rehearing it denied.

All pending petitions for rehearing are denied, and all pending suggestions for rehearing en banc are rejected.

APPENDIX D

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA")

§ 9601. Definitions [CERCLA § 101]

For purpose of this subchapter —

(1) The term "act of God" means an unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable, and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight.

(2) The term "Administrator" means the Administrator of the United States Environmental Protection Agency.

(3) The term "barrel" means forty-two United States gallons at sixty degrees Fahrenheit.

(4) The term "claim" means a demand in writing for a sum certain.

(5) The term "claimant" means any person who presents a claim for compensation under this chapter.

(6) The term "damages" means damages for injury or loss of natural resources as set forth in section 9607(a) or 9611(b) of this title.

(7) The term "drinking water supply" means any raw or finished water source that is or may be used by a public water system (as defined in the Safe Drinking Water Act [42 U.S.C.A. § 300f et seq.]) or as drinking water by one or more individuals.

(8) The term "environment" means (A) the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management authority of the United States under the Magnuson Fishery Conservation and Management Act [16 U.S.C.A. § 1801 et seq.], and (B) any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States.

(9) The term "facility" means (A) any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or (B) any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel.

(10) The term "federally permitted release" means (A) discharges in compliance with a permit under section 1342 of Title 33, (B) discharges resulting from circumstances identified and reviewed and made part of the public record with respect to a permit issued or modified under section 1342 of Title 33 and subject to a condition of such permit, (C) continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 1342 of Title 33, which are caused by events occurring within the scope of relevant operating or treatment systems, (D) discharges in compliance with a legally enforceable permit under section 1344 of Title 33, (E) releases in compliance with a legally enforceable final permit issued pursuant to section 3005(a) through (d) of the Solid Waste Disposal Act [42 U.S.C.A. § 6925(a) to (d)] from a hazardous waste treatment, storage, or disposal facility when such permit specifically identifies the hazardous substances and makes such substances subject to a standard of practice, control procedure or bioassay limitation or condition, or other control on the hazardous substances in such releases, (F) any release in compliance with a legally enforceable permit issued under section 1412 of Title 33 of [FN1] section 1413 of Title 33, (G) any injection of fluids authorized under Federal underground injection control programs or State programs submitted for Federal approval (and not disapproved by the Administrator of the Environmental Protection Agency) pursuant to part C of the Safe Drinking Water Act [42 U.S.C.A. § 300h et seq.], (H) any emission into the air subject to a permit or control regulation under section 111 [42 U.S.C.A. § 7411], section 112 [42 U.S.C.A. § 7412], Title I part C [42 U.S.C.A. § 7470 et seq.], Title I part D [42 U.S.C.A. § 7501 et seq.], or State implementation plans submitted in accordance with section 110 of the Clean Air Act [42 U.S.C.A. § 7410] (and not disapproved by the Administrator of the Environmental Protection Agency), including any schedule or waiver granted, promulgated, or approved under these sections, (I) any injection of fluids or other materials authorized under applicable State law (i) for the purpose of stimulating or treating wells for the production of crude oil, natural gas, or water, (ii) for the purpose of secondary, tertiary, or other enhanced recovery of crude oil or natural gas, or (iii) which are brought to the surface in conjunction with the production of crude oil or natural gas and which are reinjected, (J) the introduction of any pollutant into a publicly owned treatment works when such pollutant is specified in and in compliance with applicable pretreatment standards of section 1317(b) or (c) of Title 33 and

enforceable requirements in a pretreatment program submitted by a State or municipalilty for Federal approval under section 1342 of Title 33, and (K) any release of source, special nuclear, or byproduct material, as those terms are defined in the Atomic Energy Act of 1954 [42 U.S.C.A. § 2011 et seq.], in compliance with a legally enforceable license, permit, regulation, or order issued pursuant to the Atomic Energy Act of 1954.

(11) The term "Fund" or "Trust Fund" means the Hazardous Substance Superfund established by section 9507 of Title 26.

(12) The term "ground water" means water in a saturated zone or stratum beneath the surface of land or water.

(13) The term "guarantor" means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under this chapter.

(14) The term "hazardous substance" means (A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 U.S.C.A. § 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 U.S.C.A. § 6901 et seq.] has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act [42 U.S.C.A. § 7412], and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

. . . .

(29) The terms "disposal", "hazardous waste", and "treatment" shall have the meaning provided in section 1004 of the Solid Waste Disposal Act [42 U.S.C.A. § 6903].

. . . .

§ 9605. National contingency plan; preparation, contents, etc. [CERCLA § 105]

(a) Revision and republication

Within one hundred and eighty days after December 11, 1980, the President shall, after notice and opportunity for public comments, revise and republish the national contingency plan for the removal of oil and hazardous substances, originally prepared and published pursuant to section 1321 of Title 33, to reflect and effectuate the responsibilities and powers created by this chapter, in addition to those matters specified in section 1321(c)(2) of Title 33. Such revision shall include a section of the plan to be known as the national hazardous substance response plan which shall establish procedures and standards for responding to releases of hazardous substances, pollutants, and contaminants, which shall include at a minimum:

(1) methods for discovering and investigating facilities at which hazardous substances have been disposed of or otherwise come to be located;

(2) methods for evaluating, including analyses of relative cost, and remedying any releases or threats of releases from facilities which pose substantial danger to the public health or the environment;

(3) methods and criteria for determining the appropriate extent of removal, remedy, and other measures authorized by this chapter;

(4) appropriate roles and responsibilities for the Federal, State, and local governments and for interstate and nongovernmental entities in effectuating the plan;

(5) provision for identification, procurement, maintenance, and storage of response equipment and supplies;

(6) a method for and assignment of responsibility for reporting the existence of such facilities which may be located on federally owned or controlled properties and any releases of hazardous substances from such facilities;

(7) means of assuring that remedial action measures are cost-effective over the period of potential exposure to the hazardous substances or contaminated materials;

(8)(A) criteria for determining priorities among releases or threatened releases throughout the United States for the purpose of taking remedial action and, to the extent practicable taking into account the potential urgency of such action, for the purpose of taking removal action. Criteria and priorities under this paragraph shall be based upon

relative risk or danger to public health or welfare or the environment, in the judgment of the President, taking into account to the extent possible the population at risk, the hazard potential of the hazardous substances at such facilities, the potential for contamination of drinking water supplies, the potential for direct human contact, the potential for destruction of sensitive ecosystems, the damage to natural resources which may affect the human food chain and which is associated with any release or threatened release, the contamination or potential contamination of the ambient air which is associated with the release or threatened release, State preparedness to assume State costs and responsibilities, and other appropriate factors;

(B) based upon the criteria set forth in subparagraph (A) of this paragraph, the President shall list as part of the plan national priorities among the known releases or threatened releases throughout the United States and shall revise the list no less often than annually. Within one year after December 11, 1980, and annually thereafter, each State shall establish and submit for consideration by the President priorities for remedial action among known releases and potential releases in that State based upon the criteria set forth in subparagraph (A) of this paragraph. In assembling or revising the national list, the President shall consider any priorities established by the States. To the extent practicable, the highest priority facilities shall be designated individually and shall be referred to as the "top priority among known response targets", and, to the extent practicable, shall include among the one hundred highest priority facilities one such facility from each State which shall be the facility designated by the State as presenting the greatest danger to public health or welfare or the environment among the known facilities in such State. A State shall be allowed to designate its highest priority facility only once. Other priority facilities or incidents may be listed singly or grouped for response priority purposes;

(9) specified roles for private organizations and entities in preparation for response and in responding to releases of hazardous substances, including identification of appropriate qualifications and capacity therefor and including consideration of minority firms in accordance with subsection (f) of this section; and

(10) standards and testing procedures by which alternative or innovative treatment technologies can be determined to be appropriate for utilization in response actions authorized by this chapter.

The plan shall specify procedures, techniques, materials, equipment, and methods to be employed in identifying, removing, or remedying releases of hazardous substances comparable to those required under section 1321(c)(2)(F) and (G) and (j)(1) of Title 33. Following publication of the revised national contingency plan, the response to and actions to minimize damage from hazardous substances releases shall, to the greatest extent possible, be in accordance with the provisions of the plan. The President may, from time to time, revise and republish the national contingency plan.

(b) Revision of plan

Not later than 18 months after the enactment of the Superfund Amendments and Reauthorization Act of 1986 [October 17, 1986], the President shall revise the National Contingency Plan to reflect the requirements of such amendments. The portion of such Plan known as "the National Hazardous Substance Response Plan" shall be revised to provide procedures and standards for remedial actions undertaken pursuant to this chapter which are consistent with amendments made by the Superfund Amendments and Reauthorization Act of 1986 relating to the selection of remedial action.

(c) Hazard ranking system

(1) Revision

Not later than 18 months after October 17, 1986, and after publication of notice and opportunity for submission of comments in accordance with section 553 of Title 5, the President shall by rule promulgate amendments to the hazard ranking system in effect on September 1, 1984. Such amendments shall assure, to the maximum extent feasible, that the hazard ranking system accurately assesses the relative degree of risk to human health and the environment posed by sites and facilities subject to review. The President shall establish an effective date for the amended hazard ranking system which is not later than 24 months after October 17, 1986. Such amended hazard ranking system shall be applied to any site or facility to be newly listed on the National Priorities List after the effective date established by the President. Until such effective date of the regulations, the hazard ranking system in effect on September 1, 1984, shall continue in full force and effect.

(2) Health assessment of water contamination risks

In carrying out this subsection, the President shall ensure that the human health risks associated with the contamination or potential contamination (either directly or as a result of the runoff of any hazardous substance or pollutant or contaminant from sites or facilities) of surface water are appropriately assessed where such surface water is, or can be, used for recreation or potable water consumption. In making the assessment required pursuant to the preceding sentence, the President shall take into account the potential migration of any hazardous substance or pollutant or contaminant through such surface water to downstream sources of drinking water.

(3) Reevaluation not required

The President shall not be required to reevaluate, after October 17, 1986, the hazard ranking of any facility which was evaluated in accordance with the criteria under this section before the effective date of the amendments to the hazard ranking system under this subsection and which was assigned a national priority under the National Contingency Plan.

(4) New information

Nothing in paragraph (3) shall preclude the President from taking new information into account in undertaking response actions under this chapter.

(d) Petition for assessment of release

Any person who is, or may be, affected by a release or threatened release of a hazardous substance or pollutant or contaminant, may petition the President to conduct a preliminary assessment of the hazards to public health and the environment which are associated with such release or threatened release. If the President has not previously conducted a preliminary assessment of such release, the President shall, within 12 months after the receipt of any such petition, complete such assessment or provide an explanation of why the assessment is not appropriate. If the preliminary assessment indicates that the release or threatened release concerned may pose a threat to human health or the environment, the President shall promptly evaluate such release or threatened release in accordance with the hazard ranking system referred to in paragraph (8)(A) of subsection (a) of this section to determine the national priority of such release or threatened release.

(e) Releases from earlier sites

Whenever there has been, after January 1, 1985, a significant release of hazardous substances or pollutants or contaminants from a site which is listed by the President as a "Site Cleaned Up To Date" on the National Priorities List (revised edition, December 1984) the site shall be restored to the National Priorities List, without application of the hazard ranking system.

(f) Minority contractors

In awarding contracts under this chapter, the President shall consider the availability of qualified minority firms. The President shall describe, as part of any annual report submitted to the Congress under this chapter, the participation of minority firms in contracts carried out under this chapter. Such report shall contain a brief description of the contracts which have been awarded to minority firms under this chapter and of the efforts made by the President to encourage the participation of such firms in programs carried out under this chapter.

(g) Special study wastes

(1) Application

This subsection applies to facilities--

(A) which as of October 17, 1986, were not included on, or proposed for inclusion on, the National Priorities List; and

(B) at which special study wastes described in paragraph (2), (3)(A)(ii) or (3)(A)(iii) of section 6921(b) of this title are present in significant quantities, including any such facility from which there has been a release of a special study waste.

(2) Considerations in adding facilities to NPL

Pending revision of the hazard ranking system under subsection (c) of this section, the President shall consider each of the following factors in adding facilities covered by this section to the National Priorities List:

(A) The extent to which hazard ranking system score for the facility is affected by the presence of any special study waste at, or any release from, such facility.

(B) Available information as to the quantity, toxicity, and concentration of hazardous substances that are constituents of any special study waste at, or released from such facility, the extent of or potential for release of such hazardous constituents, the exposure or potential exposure to human population and the environment, and the degree of hazard to human health or the environment posed by the release of such hazardous constituents at such facility. This subparagraph refers only to available information on actual concentrations of hazardous substances and not on the total quantity of special study waste at such facility.

(3) Savings provisions

Nothing in this subsection shall be construed to limit the authority of the President to remove any facility which as of October 17, 1986, is included on the National Priorities List from such List, or not to list any facility which as of such date is proposed for inclusion on such list.

(4) Information gathering and analysis

Nothing in this chapter shall be construed to preclude the expenditure of monies from the Fund for gathering and analysis of information which will enable the President to consider the specific factors required by paragraph (2).

§ 9607. Liability [CERCLA § 107]

(a) **Covered persons; scope; recoverable costs and damages; interest rate; "comparable maturity" date**

Notwithstanding any other provision or rule of law, and subject only to the defenses set forth in subsection (b) of this section—

(1) the owner and operator of a vessel or a facility,

(2) any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of,

(3) any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, by any other party or entity, at any facility or incineration vessel owned or operated by another party or entity and containing such hazardous substances, and

(4) any person who accepts or accepted any hazardous substances for transport to disposal or treatment facilities, incineration vessels or sites selected by such person, from which there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance, shall be liable for—

(A) all costs of removal or remedial action incurred by the United States Government or a State or an Indian tribe not inconsistent with the national contingency plan;

(B) any other necessary costs of response incurred by any other person consistent with the national contingency plan;

(C) damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction, or loss resulting from such a release; and

(D) the costs of any health assessment or health effects study carried out under section 9604(i) of this title.

The amounts recoverable in an action under this section shall include interest on the amounts recoverable under subparagraphs (A) through (D). Such interest shall accrue from the later of (i) the date payment of a specified amount is demanded in writing, or (ii) the date of the expenditure concerned. The rate of interest on the outstanding unpaid balance of the amounts recoverable

under this section shall be the same rate as is specified for interest on investments of the Hazardous Substance Superfund established under subchapter A of chapter 98 of Title 26. For purposes of applying such amendments to interest under this subsection, the term "comparable maturity" shall be determined with reference to the date on which interest accruing under this subsection commences.

(b) Defenses

There shall be no liability under subsection (a) of this section for a person otherwise liable who can establish by a preponderance of the evidence that the release or threat of release of a hazardous substance and the damages resulting therefrom were caused solely by—

(1) an act of God;

(2) an act of war;

(3) an act or omission of a third party other than an employee or agent of the defendant, or than one whose act or omission occurs in connection with a contractual relationship, existing directly or indirectly, with the defendant (except where the sole contractual arrangement arises from a published tariff and acceptance for carriage by a common carrier by rail), if the defendant establishes by a preponderance of the evidence that (a) he exercised due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts and circumstances, and (b) he took precautions against foreseeable acts or omissions of any such third party and the consequences that could foreseeably result from such acts or omissions; or

(4) any combination of the foregoing paragraphs.

. . . .

§ 9613. Civil proceedings [CERCLA § 113]

(b) Jurisdiction; venue

Except as provided in subsections (a) and (h) of this section, the United States district courts shall have exclusive original jurisdiction over all controversies arising under this chapter, without regard to the citizenship of the parties or the amount in controversy. Venue shall lie in any district in which the release or damages occurred, or in which the defendant resides, may be found, or has his principal office. For the purposes of this section, the Fund shall reside in the District of Columbia.

. . . .

APPENDIX E

The Solid Waste Disposal Act ("SWDA")

§ 6901. Congressional findings [SWDA § 1002]

(a) Solid waste

The Congress finds with respect to solid waste—

(1) that the continuing technological progress and improvement in methods of manufacture, packaging, and marketing of consumer products has resulted in an ever-mounting increase, and in a change in the characteristics, of the mass material discarded by the purchaser of such products;

(2) that the economic and population growth of our Nation, and the improvements in the standard of living enjoyed by our population, have required increased industrial production to meet our needs, and have made necessary the demolition of old buildings, the construction of new buildings, and the provision of highways and other avenues of transportation, which, together with related industrial, commercial, and agricultural operations, have resulted in a rising tide of scrap, discarded, and waste materials;

(3) that the continuing concentration of our population in expanding metropolitan and other urban areas has presented these communities with serious financial, management, intergovernmental, and technical problems in the disposal of solid wastes resulting from the industrial, commercial, domestic, and other activities carried on in such areas;

(4) that while the collection and disposal of solid wastes should continue to be primarily the function of State, regional, and local agencies, the problems of waste disposal as set forth above have become a matter national in scope and in concern and necessitate Federal action through financial and technical assistance and leadership in the development, demonstration, and application of new and improved methods and processes to reduce the amount of waste and unsalvageable materials and to provide for proper and economical solid waste disposal practices.

(b) Environment and health

The Congress finds with respect to the environment and health, that—

(1) although land is too valuable a national resource to be needlessly polluted by discarded materials, most solid waste is disposed of on land in open dumps and sanitary landfills;

(2) disposal of solid waste and hazardous waste in or on the land without careful planning and management can present a danger to human health and the environment;

(3) as a result of the Clean Air Act [42 U.S.C.A. § 7401 et seq.], the Waste Pollution Control Act [33 U.S.C.A. § 1251 et seq.], and other Federal and State laws respecting public health and the environment, greater amounts of solid waste (in the form of sludge and other pollution treatment residues) have been created. Similarly, inadequate and environmentally unsound practices for the disposal or use of solid waste have created greater amounts of air and water pollution and other problems for the environment and for health;

(4) open dumping is particularly harmful to health, contaminates drinking water from underground and surface supplies, and pollutes the air and the land;

(5) the placement of inadequate controls on hazardous waste management will result in substantial risks to human health and the environment;

(6) if hazardous waste management is improperly performed in the first instance, corrective action is likely to be expensive, complex, and time consuming;

(7) certain classes of land disposal facilities are not capable of assuring long-term containment of certain hazardous wastes, and to avoid substantial risk to human health and the environment, reliance on land disposal should be minimized or eliminated, and land disposal, particularly landfill and surface impoundment, should be the least favored method for managing hazardous wastes; and

(8) alternatives to existing methods of land disposal must be developed since many of the cities in the United States will be running out of suitable solid waste disposal sites within five years unless immediate action is taken.

(c) Materials

The Congress finds with respect to materials, that—

(1) millions of tons of recoverable material which could be used are needlessly buried each year;

(2) methods are available to separate usable materials from solid waste; and

(3) the recovery and conservation of such materials can reduce the dependence of the United States on foreign resources and reduce the deficit in its balance of payments.

(d) Energy

The Congress finds with respect to energy, that—

(1) solid waste represents a potential source of solid fuel, oil, or gas that can be converted into energy;

(2) the need exists to develop alternative energy sources for public and private consumption in order to reduce our dependence on such sources as petroleum products, natural gas, nuclear and hydroelectric generation; and

(3) technology exists to produce usable energy from solid waste.

§ 6902. Objectives and national policy [SWDA § 1003]

(a) Objectives

The objectives of this chapter are to promote the protection of health and the environment and to conserve valuable material and energy resources by—

(1) providing technical and financial assistance to State and local governments and interstate agencies for the development of solid waste management plans (including resource recovery and resource conservation systems) which will promote improved solid waste management techniques (including more effective organizational arrangements), new and improved methods of collection, separation, and recovery of solid waste, and the environmentally safe disposal of nonrecoverable residues;

(2) providing training grants in occupations involving the design, operation, and maintenance of solid waste disposal systems;

(3) prohibiting future open dumping on the land and requiring the conversion of existing open dumps to facilities which do not pose a danger to the environment or to health;

(4) assuring that hazardous waste management practices are conducted in a manner which protects human health and the environment;

(5) requiring that hazardous waste be properly managed in the first instance thereby reducing the need for corrective action at a future date;

(6) minimizing the generation of hazardous waste and the land disposal of hazardous waste by encouraging process substitution, materials recovery, properly conducted recycling and reuse, and treatment;

(7) establishing a viable Federal-State partnership to carry out the purposes of this chapter and insuring that the Administrator will, in carrying out the provisions of subchapter III of this chapter give a high priority to assisting and cooperating with States in obtaining full authorization of State programs under subchapter III of this chapter;

(8) providing for the promulgation of guidelines for solid waste collection, transport, separation, recovery, and disposal practices and systems;

(9) promoting a national research and development program for improved solid waste management and resource conservation techniques, more effective organizational

arrangements, and new and improved methods of collection, separation, and recovery, and recycling of solid wastes and environmentally safe disposal of nonrecoverable residues;

(10) promoting the demonstration, construction, and application of solid waste management, resource recovery, and resource conservation systems which preserve and enhance the quality of air, water, and land resources; and

(11) establishing a cooperative effect among the Federal, State, and local governments and private enterprise in order to recover valuable materials and energy from solid waste.

(b) National policy

The Congress hereby declares it to be the national policy of the United States that, wherever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible. Waste that is nevertheless generated should be treated, stored, or disposed of so as to minimize the present and future threat to human health and the environment.

§ 6903. Definitions [SWDA § 1004]

As used in this chapter:

. . . .

(3) The term "disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

. . . .

(5) The term "hazardous waste" means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—

(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

(27) The term "solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 1342 of title 33, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 U.S.C.A. § 2011 et seq.].

§ 6921. Identification and listing of hazardous waste [SWDA § 3001]

(a) Criteria for identification or listing

Not later than eighteen months after October 21, 1976, the Administrator shall, after notice and opportunity for public hearing, and after consultation with appropriate Federal and State agencies, develop and promulgate criteria for identifying the characteristics of hazardous waste, and for listing hazardous waste, which should be subject to the provisions of this subchapter, taking into account toxicity, persistence, and degradability in nature, potential for accumulation in tissue, and other related factors such as flammability, corrosiveness, and other hazardous characteristics. Such criteria shall be revised from time to time as may be appropriate.

(b) Identification and listing

(1) Not later than eighteen months after October 21, 1976, and after notice and opportunity for public hearing, the Administrator shall promulgate regulations identifying the characteristics of hazardous waste, and listing particular hazardous wastes (within the meaning of section 6903(5) of this title), which shall be subject to the provisions of this subchapter. Such regulations shall be based on the criteria promulgated under subsection (a) of this section and shall be revised from time to time thereafter as may be appropriate. The Administrator, in cooperation with the Agency for Toxic Substances and Disease Registry and the National Toxicology Program, shall also identify or list those hazardous wastes which shall be subject to the provisions of this subchapter solely because of the presence in such wastes of certain constituents (such as identified carcinogens, mutagens, or teratagens) at levels in excess of levels which endanger human health.

(2)(A) Notwithstanding the provisions of paragraph (1) of this subsection, drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy shall be subject only to existing State or Federal regulatory programs in lieu of this subchapter until at least 24 months after October 21, 1980, and after promulgation of the regulations in accordance with subparagraphs (B) and (C) of this paragraph. It is the sense of the Congress that such State or Federal programs should include, for waste disposal

sites which are to be closed, provisions requiring at least the following:

(i) The identification through surveying, platting, or other measures, together with recordation of such information on the public record, so as to assure that the location where such wastes are disposed of can be located in the future; except however, that no such surveying, platting, or other measure identifying the location of a disposal site for drilling fluids and associated wastes shall be required if the distance from the disposal site to the surveyed or platted location to the associated well is less than two hundred lineal feet; and

(ii) A chemical and physical analysis of a produced water and a composition of a drilling fluid suspected to contain a hazardous material, with such information to be acquired prior to closure and to be placed on the public record.

(B) Not later than six months after completion and submission of the study required by section 6982(m) of this title, the Administrator shall, after public hearings and opportunity for comment, determine either to promulgate regulations under this subchapter for drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy or that such regulations are unwarranted. The Administrator shall publish his decision in the Federal Register accompanied by an explanation and justification of the reasons for it. In making the decision under this paragraph, the Administrator shall utilize the information developed or accumulated pursuant to the study required under section 6982(m) of this title.

(C) The Administrator shall transmit his decision, along with any regulations, if necessary, to both Houses of Congress. Such regulations shall take effect only when authorized by Act of Congress.

(3)(A) Notwithstanding the provisions of paragraph (1) of this subsection, each waste listed below shall, except as provided in subparagraph (B) of this paragraph, be subject only to regulation under other applicable provisions of Federal or State law in lieu of this subchapter until at least six months after the date of submission of the applicable study required to be conducted under subsection (f), (n), (o), or (p) of section 6982 of this title and after promulgation of regulations in accordance with subparagraph (C) of this paragraph:

(i) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels.

(ii) Solid waste from the extraction, beneficiation, and processing of ores and minerals, including phosphate rock and overburden from the mining of uranium ore.

(iii) Cement kiln dust waste.

(B)(i) Owners and operators of disposal sites for wastes listed in subparagraph (A) may be required by the Administrator, through regulations prescribed under authority of section 6912 of this title—

(I) as to disposal sites for such wastes which are to be closed, to identify the locations of such sites through surveying, platting, or other measures, together with recordation of such information on the public record, to assure that the locations where such wastes are disposed of are known and can be located in the future, and

(II) to provide chemical and physical analysis and composition of such wastes, based on available information, to be placed on the public record.

(ii)(I) In conducting any study under subsection (f), (n), (o), or (p), of section 6982 of this title, any officer, employee, or authorized representative of the Environmental Protection Agency, duly designated by the Administrator, is authorized, at reasonable times and as reasonably necessary for the purposes of such study, to enter any establishment where any waste subject to such study is generated, stored, treated, disposed of, or transported from; to inspect, take samples, and conduct monitoring and testing; and to have access to and copy records relating to such waste. Each such inspection shall be commenced and completed with reasonable promptness. If the officer, employee, or authorized representative obtains any samples prior to leaving the premises, he shall give to the owner, operator, or agent in charge a receipt describing the sample obtained and if requested a portion of each such sample equal in volume or weight to the portion retained. If any analysis is made of such samples, or monitoring and testing performed, a copy of the results shall be furnished promptly to the owner, operator, or agent in charge.

(II) Any records, reports, or information obtained from any person under subclause (I) shall

be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or particular part thereof, to which the Administrator has access under this subparagraph if made public, would divulge information entitled to protection under section 1905 of Title 18, the Administrator shall consider such information or particular portion thereof confidential in accordance with the purposes of that section, except that such record, report, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this chapter. Any person not subject to the provisions of section 1905 of Title 18 who knowingly and willfully divulges or discloses any information entitled to protection under this subparagraph shall, upon conviction, be subject to a fine of not more than $5,000 or to imprisonment not to exceed one year, or both.

(iii) The Administrator may prescribe regulations, under the authority of this chapter, to prevent radiation exposure which presents an unreasonable risk to human health from the use in construction or land reclamation (with or without revegetation) of (I) solid waste from the extraction, beneficiation, and processing of phosphate rock or (II) overburden from the mining of uranium ore.

(iv) Whenever on the basis of any information the Administrator determines that any person is in violation of any requirement of this subparagraph, the Administrator shall give notice to the violator of his failure to comply with such requirement. If such violation extends beyond the thirtieth day after the Administrator's notification, the Administrator may issue an order requiring compliance within a specified time period or the Administrator may commence a civil action in the United States district court in the district in which the violation occurred for appropriate relief, including a temporary or permanent injunction.

(C) Not later than six months after the date of submission of the applicable study required to be conducted under subsection (f), (n), (o), or (p), of section 6982 of this title, the Administrator shall, after public hearings and opportunity for comment, either determine to promulgate regulations under this subchapter for each waste listed in subparagraph (A) of this paragraph or determine that such

regulations are unwarranted. The Administrator shall publish his determination, which shall be based on information developed or accumulated pursuant to such study, public hearings, and comment, in the Federal Register accompanied by an explanation and justification of the reasons for it.

(c) Petition by State Governor

At any time after the date eighteen months after October 21, 1976, the Governor of any State may petition the Administrator to identify or list a material as a hazardous waste. The Administrator shall act upon such petition within ninety days following his receipt thereof and shall notify the Governor of such action. If the Administrator denies such petition because of financial considerations, in providing such notice to the Governor he shall include a statement concerning such considerations.

(d) Small quantity generator waste

(1) By March 31, 1986, the Administrator shall promulgate standards under sections 6922, 6923, and 6924 of this title for hazardous waste generated by a generator in a total quantity of hazardous waste greater than one hundred kilograms but less than one thousand kilograms during a calendar month.

(2) The standards referred to in paragraph (1), including standards applicable to the legitimate use, reuse, recycling, and reclamation of such wastes, may vary from the standards applicable to hazardous waste generated by larger quantity generators, but such standards shall be sufficient to protect human health and the environment.

(3) Not later than two hundred and seventy days after November 8, 1984, any hazardous waste which is part of a total quantity generated by a generator generating greater than one hundred kilograms but less than one thousand kilograms during one calendar month and which is shipped off the premises on which such waste is generated shall be accompanied by a copy of the Environmental Protection Agency Uniform Hazardous Waste Manifest form signed by the generator. This form shall contain the following information:

(A) the name and address of the generator of the waste;

(B) the United States Department of Transportation description of the waste, including the proper shipping

name, hazard class, and identification number (UN/NA), if applicable;

(C) the number and type of containers;

(D) the quantity of waste being transported; and

(E) the name and address of the facility designated to receive the waste.

If subparagraph (B) is not applicable, in lieu of the description referred to in such subparagraph (B), the form shall contain the Environmental Protection Agency identification number, or a generic description of the waste, or a description of the waste by hazardous waste characteristic. Additional requirements related to the manifest form shall apply only if determined necessary by the Administrator to protect human health and the environment.

(4) The Administrator's responsibility under this subchapter to protect human health and the environment may require the promulgation of standards under this subchapter for hazardous wastes which are generated by any generator who does not generate more than one hundred kilograms of hazardous waste in a calendar month.

(5) Until the effective date of standards required to be promulgated under paragraph (1), any hazardous waste identified or listed under section 6921 of this title generated by any generator during any calendar month in a total quantity greater than one hundred kilograms but less than one thousand kilograms, which is not treated, stored, or disposed of at a hazardous waste treatment, storage or disposal facility with a permit under section 6925 of this title, shall be disposed of only in a facility which is permitted, licensed, or registered by a State to manage municipal or industrial solid waste.

(6) Standards promulgated as provided in paragraph (1) shall, at a minimum require that all treatment, storage, or disposal of hazardous wastes generated by generators referred to in paragraph (1) shall occur at a facility with interim status or a permit under this subchapter, except that onsite storage of hazardous waste generated by a generator generating a total quantity of hazardous waste greater than one hundred kilograms, but less than one thousand kilograms during a calendar month, may occur without the requirement of a permit for up to one hundred and eighty days. Such onsite storage may occur without the requirement of a permit for not more than six thousand kilograms for up to two hundred and seventy days if such generator must ship or haul such waste over two hundred miles.

(7)(A) Nothing in this subsection shall be construed to affect or impair the validity of regulations promulgated by the Secretary of Transportation pursuant to the Hazardous Materials Transportation Act [49 U.S.C.A. § 1801 et seq.].

(B) Nothing in this subsection shall be construed to affect, modify, or render invalid any requirements in regulations promulgated prior to January 1, 1983 applicable to any acutely hazardous waste identified or listed under section 6921 of this title which is generated by any generator during any calendar month in a total quantity less than one thousand kilograms.

(8) Effective March 31, 1986, unless the Administrator promulgates standards as provided in paragraph (1) of this subsection prior to such date, hazardous waste generated by any generator in a total quantity greater than one hundred kilograms but less than one thousand kilograms during a calendar month shall be subject to the following requirements until the standards referred to in paragraph (1) of this subsection have become effective:

(A) the notice requirements of paragraph (3) of this subsection shall apply and in addition, the information provided in the form shall include the name of the waste transporters and the name and address of the facility designated to receive the waste;

(B) except in the case of the onsite storage referred to in paragraph (6) of this subsection, the treatment, storage, or disposal of such waste shall occur at a facility with interim status or a permit under this subchapter;

(C) generators of such waste shall file manifest exception reports as required of generators producing greater amounts of hazardous waste per month except that such reports shall be filed by January 31, for any waste shipment occurring in the last half of the preceding calendar year, and by July 31, for any waste shipment occurring in the first half of the calendar year; and

(D) generators of such waste shall retain for three years a copy of the manifest signed by the designated facility that has received the waste.

Nothing in this paragraph shall be construed as a determination of the standards appropriate under paragraph (1).

(9) The last sentence of section 6930(b) of this title shall not apply to regulations promulgated under this subsection.

(e) Specified wastes

(1) Not later than 6 months after November 8, 1984, the Administrator shall, where appropriate, list under subsection (b)(1) of this section, additional wastes containing chlorinated dioxins or chlorinated-dibenzofurans. Not later than one year after November 8, 1984, the Administrator shall, where appropriate, list under subsection (b)(1) of this section wastes containing remaining halogenated dioxins and halogenated-dibenzofurans.

(2) Not later than fifteen months after November 8, 1984, the Administrator shall make a determination of whether or not to list under subsection (b)(1) of this section the following wastes: Chlorinated Aliphatics, Dioxin, Dimethyl Hydrazine, TDI (toluene diisocyanate), Carbamates, Bromacil, Linuron, Organo-bromines, solvents, refining wastes, chlorinated aromatics, dyes and pigments, inorganic chemical industry wastes, lithium batteries, coke byproducts, paint production wastes, and coal slurry pipeline effluent.

(f) Delisting procedures

(1) When evaluating a petition to exclude a waste generated at a particular facility from listing under this section, the Administrator shall consider factors (including additional constituents) other than those for which the waste was listed if the Administrator has a reasonable basis to believe that such additional factors could cause the waste to be a hazardous waste. The Administrator shall provide notice and opportunity for comment on these additional factors before granting or denying such petition.

(2)(A) To the maximum extent practicable the Administrator shall publish in the Federal Register a proposal to grant or deny a petition referred to in paragraph (1) within twelve months after receiving a complete application to exclude a waste generated at a particular facility from being regulated as a hazardous waste and shall grant or deny such a petition within twenty-four months after receiving a complete application.

(B) The temporary granting of such a petition prior to November 8, 1984, without the opportunity for public comment and the full consideration of such comments shall not continue for more than twenty-four months after November 8, 1984. If a final decision to grant or deny such a petition has not been promulgated after notice and opportunity for public comment within the time limit

prescribed by the preceding sentence, any such temporary granting of such petition shall cease to be in effect.

(g) EP toxicity

Not later than twenty-eight months after November 8, 1984, the Administrator shall examine the deficiencies of the extraction procedure toxicity characteristic as a predictor of the leaching potential of wastes and make changes in the extraction procedure toxicity characteristic, including changes in the leaching media, as are necessary to insure that it accurately predicts the leaching potential of wastes which pose a threat to human health and the environment when mismanaged.

(h) Additional characteristics

Not later than two years after November 8, 1984 the Administrator shall promulgate regulations under this section identifying additional characteristics of hazardous waste, including measures or indicators of toxicity.

(i) Clarification of household waste exclusion

A resource recovery facility recovering energy from the mass burning of municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this subchapter, if—

(1) such facility—

(A) receives and burns only—

(i) household waste (from single and multiple dwellings, hotels, motels, and other residential sources), and

(ii) solid waste from commercial or industrial sources that does not contain hazardous waste identified or listed under this section, and

(B) does not accept hazardous wastes identified or listed under this section, and

(2) the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

§ 6982. Special studies; plans for research, development, and demonstrations [SWDA § 8002]

(a) Glass and plastic

The Administrator shall undertake a study and publish a report on resource recovery from glass and plastic waste, including a scientific, technological, and economic investigation of potential solutions to implement such recovery.

(b) Composition of waste stream

The Administrator shall undertake a systematic study of the composition of the solid waste stream and of anticipated future changes in the composition of such stream and shall publish a report containing the results of such study and quantitatively evaluating the potential utility of such components.

(c) Priorities study

For purposes of determining priorities for research on recovery of materials and energy from solid waste and developing materials and energy recovery research, development, and demonstration strategies, the Administrator shall review, and make a study of, the various existing and promising techniques of energy recovery from solid waste (including, but not limited to, waterwall furnace incinerators, dry shredded fuel systems, pyrolysis, densified refuse-derived fuel systems, anerobic digestion, and fuel and feedstock preparation systems). In carrying out such study the Administrator shall investigate with respect to each such technique—

(1) the degree of public need for the potential results of such research, development, or demonstration,

(2) the potential for research, development, and demonstration without Federal action, including the degree of restraint on such potential posed by the risks involved, and

(3) the magnitude of effort and period of time necessary to develop the technology to the point where Federal assistance can be ended.

(d) Small-scale and low technology study

The Administrator shall undertake a comprehensive study and analysis of, and publish a report on, systems of small-scale and low technology solid waste management, including household resource recovery and resource recovery systems which have

special application to multiple dwelling units and high density housing and office complexes. Such study and analysis shall include an investigation of the degree to which such systems could contribute to energy conservation.

(e) Front-end source separation

The Administrator shall undertake research and studies concerning the compatibility of front-end source separation systems with high technology resource recovery systems and shall publish a report containing the results of such research and studies.

(f) Mining waste

The Administrator, in consultation with the Secretary of the Interior, shall conduct a detailed and comprehensive study on the adverse effects of solid wastes from active and abandoned surface and underground mines on the environment, including, but not limited to, the effects of such wastes on humans, water, air, health, welfare, and natural resources, and on the adequacy of means and measures currently employed by the mining industry, Government agencies, and others to dispose of and utilize such solid wastes and to prevent or substantially mitigate such adverse effects. Such study shall include an analysis of—

(1) the sources and volume of discarded material generated per year from mining;

(2) present disposal practices;

(3) potential dangers to human health and the environment from surface runoff of leachate and air pollution by dust;

(4) alternatives to current disposal methods;

(5) the cost of those alternatives in terms of the impact on mine product costs; and

(6) potential for use of discarded material as a secondary source of the mine product.

In furtherance of this study, the Administrator shall, as he deems appropriate, review studies and other actions of other Federal agencies concerning such wastes with a view toward avoiding duplication of effort and the need to expedite such study. Not later than thirty-six months after October 21, 1980, the Administrator shall publish a report of such study and shall include appropriate findings and recommendations for Federal and non-Federal actions concerning such effects. Such report shall be submitted to the Committee on Environment and Public Works of

the United States Senate and the Committee on Energy and Commerce of the United States House of Representatives.

(g) Sludge

The Administrator shall undertake a comprehensive study and publish a report on sludge. Such study shall include an analysis of—

(1) what types of solid waste (including but not limited to sewage and pollution treatment residues and other residues from industrial operations such as extraction of oil from shale, liquefaction and gasification of coal and coal slurry pipeline operations) shall be classified as sludge;

(2) the effects of air and water pollution legislation on the creation of large volumes of sludge;

(3) the amounts of sludge originating in each State and in each industry producing sludge;

(4) methods of disposal of such sludge, including the cost, efficiency, and effectiveness of such methods;

(5) alternative methods for the use of sludge, including agricultural applications of sludge and energy recovery from sludge; and

(6) methods to reclaim areas which have been used for the disposal of sludge or which have been damaged by sludge.

(h) Tires

The Administrator shall undertake a study and publish a report respecting discarded motor vehicle tires which shall include an analysis of the problems involved in the collection, recovery of resources including energy, and use of such tires.

(i) Resource recovery facilities

The Administrator shall conduct research and report on the economics of, and impediments, to the effective functioning of resource recovery facilities.

(j) Resource Conservation Committee

(1) The Administrator shall serve as Chairman of a Committee composed of himself, the Secretary of Commerce, the Secretary of Labor, the Chairman of the Council on Environmental Quality, the Secretary of Treasury, the Secretary

of the Interior, the Secretary of Energy, the Chairman of the Counsel of Economic Advisors, and a representative of the Office of Management and Budget, which shall conduct a full and complete investigation and study of all aspects of the economic, social, and environmental consequences of resource conservation with respect to—

(A) the appropriateness of recommended incentives and disincentives to foster resource conservation;

(B) the effect of existing public policies (including subsidies and economic incentives and disincentives, percentage depletion allowances, capital gains treatment and other tax incentives and disincentives) upon resource conservation, and the likely effect of the modification or elimination of such incentives and disincentives upon resource conservation;

(C) the appropriateness and feasibility of restricting the manufacture or use of categories of consumer products as a resource conservation strategy;

(D) the appropriateness and feasibility of employing as a resource conservation strategy the imposition of solid waste management charges on consumer products, which charges would reflect the costs of solid waste management services, litter pickup, the value of recoverable components of such product, final disposal, and any social value associated with the nonrecycling or uncontrolled disposal of such product; and

(E) the need for further research, development, and demonstration in the area of resource conservation.

(2) The study required in paragraph (1)(D) may include pilot scale projects, and shall consider and evaluate alternative strategies with respect to—

(A) the product categories on which such charges would be imposed;

(B) the appropriate state in the production of such consumer product at which to levy such charge;

(C) appropriate criteria for establishing such charges for each consumer product category;

(D) methods for the adjustment of such charges to reflect actions such as recycling which would reduce the overall quantities of solid waste requiring disposal; and

(E) procedures for amending, modifying, or revising such charges to reflect changing conditions.

(3) The design for the study required in paragraph (1) of this subsection shall include timetables for the completion of the study. A preliminary report putting forth the study design shall be sent to the President and the Congress within six months following

October 21, 1976, and followup reports shall be sent six months thereafter. Each recommendation resulting from the study shall include at least two alternatives to the proposed recommendation.

(4) The results of such investigation and study, including recommendations, shall be reported to the President and the Congress not later than two years after October 21, 1976.

(5) There are authorized to be appropriated not to exceed $2,000,000 to carry out this subsection.

(k) Airport landfills

The Administrator shall undertake a comprehensive study and analysis of and publish a report on systems to alleviate the hazards to aviation from birds congregating and feeding on landfills in the vicinity of airports.

(l) Completion of research and studies

The Administrator shall complete the research and studies, and submit the reports, required under subsections (b), (c), (d), (e), (f), (g), and (k) of this section not later than October 1, 1978. The Administrator shall complete the research and studies, and submit the reports, required under subsections (a), (h), and (i) of this section not later than October 1, 1979. Upon completion, each study specified in subsections (a) through (k) of this section, the Administrator shall prepare a plan for research, development, and demonstration respecting the findings of the study and shall submit any legislative recommendations resulting from such study to appropriate committees of Congress.

(m) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy

(1) The Administrator shall conduct a detailed and comprehensive study and submit a report on the adverse effects, if any, of drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy on human health and the environment, including, but not limited to, the effects of such wastes on humans, water, air, health, welfare, and natural resources and on the adequacy of means and measures currently employed by the oil and gas and geothermal drilling and production industry, Government agencies, and others to dispose

of and utilize such wastes and to prevent or substantially mitigate such adverse effects. Such study shall include an analysis of—

(A) the sources and volume of discarded material generated per year from such wastes;

(B) present disposal practices;

(C) potential danger to human health and the environment from the surface runoff or leachate;

(D) documented cases which prove or have caused danger to human health and the environment from surface runoff or leachate;

(E) alternatives to current disposal methods;

(F) the cost of such alternatives; and

(G) the impact of those alternatives on the exploration for, and development and production of, crude oil and natural gas or geothermal energy.

In furtherance of this study, the Administrator shall, as he deems appropriate, review studies and other actions of other Federal agencies concerning such wastes with a view toward avoiding duplication of effort and the need to expedite such study. The Administrator shall publish a report of such study and shall include appropriate findings and recommendations for Federal and non-Federal actions concerning such effects.

(2) The Administrator shall complete the research and study and submit the report required under paragraph (1) not later than twenty-four months from October 21, 1980. Upon completion of the study, the Administrator shall prepare a summary of the findings of the study, a plan for research, development, and demonstration respecting the findings of the study, and shall submit the findings and the study, along with any recommendations resulting from such study, to the Committee on Environment and Public Works of the United States Senate and the Committee on Energy and Commerce of the United States House of Representatives.

(3) There are authorized to be appropriated not to exceed $1,000,000 to carry out the provisions of this subsection.

(n) Materials generated from the combustion of coal and other fossil fuels

The Administrator shall conduct a detailed and comprehensive study and submit a report on the adverse effects on human health and the environment, if any, of the disposal and utilization of fly ash waste, bottom ash waste, slag waste, flue gas emission control waste, and other byproduct materials generated primarily from the combustion of coal or other fossil fuels. Such study shall include an analysis of—

(1) the source and volumes of such material generated per year;

(2) present disposal and utilization practices;

(3) potential danger, if any, to human health and the environment from the disposal and reuse of such materials;

(4) documented cases in which danger to human health or the environment from surface runoff or leachate has been proved;

(5) alternatives to current disposal methods;

(6) the costs of such alternatives;

(7) the impact of those alternatives on the use of coal and other natural resources; and

(8) the current and potential utilization of such materials.

In furtherance of this study, the Administrator shall, as he deems appropriate, review studies and other actions of other Federal and State agencies concerning such material and invite participation by other concerned parties, including industry and other Federal and State agencies, with a view toward avoiding duplication of effort. The Administrator shall publish a report on such study, which shall include appropriate findings, not later than twenty-four months after October 21, 1980. Such study and findings shall be submitted to the Committee on Environment and Public Works of the United States Senate and the Committee on Energy and Commerce of the United States House of Representatives.

(o) Cement kiln dust waste

The Administrator shall conduct a detailed and comprehensive study of the adverse effects on human health and the environment, if any, of the disposal of cement kiln dust waste. Such study shall include an analysis of—

(1) the source and volumes of such materials generated per year;

(2) present disposal practices;

(3) potential danger, if any, to human health and the environment from the disposal of such materials;

(4) documented cases in which danger to human health or the environment has been proved;

(5) alternatives to current disposal methods;

(6) the costs of such alternatives;

(7) the impact of those alternatives on the use of natural resources; and

(8) the current and potential utilization of such materials.

In furtherance of this study, the Administrator shall, as he deems appropriate, review studies and other actions of other Federal and

State agencies concerning such waste or materials and invite participation by other concerned parties, including industry and other Federal and State agencies, with a view toward avoiding duplication of effort. The Administrator shall publish a report of such study, which shall include appropriate findings, not later than thirty-six months after October 21, 1980. Such report shall be submitted to the Committee on Environment and Public Works of the United States Senate and the Committee on Energy and Commerce of the United States House of Representatives.

(p) Materials generated from the extraction, beneficiation, and processing of ores and minerals, including phosphate rock and overburden from uranium mining

The Administrator shall conduct a detailed and comprehensive study on the adverse effects on human health and the environment, if any, of the disposal and utilization of solid waste from the extraction, beneficiation, and processing of ores and minerals, including phosphate rock and overburden from uranium mining. Such study shall be conducted in conjunction with the study of mining wastes required by subsection (f) of this section and shall include an analysis of—

(1) the source and volumes of such materials generated per year;

(2) present disposal and utilization practices;

(3) potential danger, if any, to human health and the environment from the disposal and reuse of such materials;

(4) documented cases in which danger to human health or the environment has been proved;

(5) alternatives to current disposal methods;

(6) the costs of such alternatives;

(7) the impact of those alternatives on the use of phosphate rock and uranium ore, and other natural resources; and

(8) the current and potential utilization of such materials.

In furtherance of this study, the Administrator shall, as he deems appropriate, review studies and other actions of other Federal and State agencies concerning such waste or materials and invite participation by other concerned parties, including industry and other Federal and State agencies, with a view toward avoiding duplication of effort. The Administrator shall publish a report of such study, which shall include appropriate findings, in conjunction with the publication of the report of the study of mining wastes required to be conducted under subsection (f) of this section. Such report and findings shall be submitted to the Committee on Environment and Public Works of the United States

Senate and the Committee on Energy and Commerce of the United States House of Representatives.